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CFETP 2A5X3B
Parts I and II
MARCH 2000

AFSC 2A5X3B

INSTRUMENT & FLIGHT CONTROL SYSTEMS

CAREER FIELD EDUCATION

AND TRAINING PLAN

CAREER FIELD EDUCATION AND TRAINING PLAN
INSTRUMENT & FLIGHT CONTROL SYSTEMS
AFSC 2A5X3B

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PART II

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INSTRUMENT & FLIGHT CONTROL SYSTEMS
CAREER FIELD EDUCATION AND TRAINING PLAN

PART I

PREFACE

1. This Career Field Education and Training Plan (CFETP) is a comprehensive education and training document that identifies life-cycle education/training requirements, training support resources, and minimum core task requirements for this specialty. The CFETP will provide personnel a clear career path to success and instill rigor in all aspects of career field training. To read, review, or print a copy of current CFETP, go to the Aircraft Maintenance Homepage at: **http://www.il.hq.af.mil/ilm/ilmm/acmaint/ac-tng.html**. ***NOTE:*** Civilians occupying associated positions will use Part II to support duty position qualification training.

2. The CFETP consists of two parts; both parts of the plan are used by supervisors to plan, manage, and control training within the career field.
2.1. Part I provides information necessary for overall management of the specialty. Section A explains how everyone will use the plan. Section B identifies career field progression information, duties and responsibilities, training strategies, and career field path. Section C associates each level with specialty qualifications (knowledge, education, training, and other). Section D indicates resource constraints. Some examples are funds, manpower, equipment, facilities. Section E identifies transition training guide requirements to support career field restructures.
2.2. Part II includes the following: Section A identifies the Specialty Training Standard (STS) and includes duties, tasks, and technical references to support training; Air Education and Training Command (AETC) conducted training; wartime course requirements; core tasks; and correspondence course requirements. Section B contains the course objective list and training standards supervisors use to determine if airmen satisfied training requirements. Section C identifies available support materials. An example is a Qualification Training Package (QTP) developed to support proficiency training. These QTP packages are identified in AFIND-8, *Numerical Index of Specialized Educational Training Publications.* Section D identifies a training course index supervisors use to determine resources available to support training; included here are both mandatory and optional courses. Section E identifies MAJCOM unique training requirements supervisors use to determine additional training requirements unique to the MAJCOM.

3. Using guidance provided in the CFETP will ensure individuals in this specialty receive effective and efficient training at the appropriate point in their career. This plan will enable us to train today's work force for tomorrow's jobs. At unit level, supervisors and trainers will use Part II to identify, plan, and conduct training commensurate with the overall goals of this plan.

ABBREVIATIONS/TERMS EXPLAINED

Advanced Training (AT). Formal course which provides individuals who are qualified in one or more positions of their Air Force Specialty (AFS) with additional skills/knowledge to enhance their expertise in the career field. Training is for selected career airmen at the advanced level of the AFS.

Air Force Job Qualification Standard (AFJQS). A comprehensive task list that describes a particular job type or duty position. They are used by supervisors to document task qualifications. The tasks on AFJQS are common to all persons serving in the described duty position.

Career Field Education and Training Plan (CFETP). A CFETP is a comprehensive, multipurpose document covering the entire spectrum of education and training for a career field. It outlines a logical growth plan that includes training resources and is designed to make career field training identifiable, to eliminate duplication, and to ensure this training is budget defensible.

Certification. A formal indication of an individual's ability to perform a task to required standards.

Certification Official. A person the commander assigns to determine an individual's ability to perform a task to required standards.

Continuation Training. Additional training exceeding requirements with emphasis on present or future duty assignments.

Core Task. A task Air Force Career Field Managers (AFCFMs) identify as a minimum qualification requirement within an Air Force Specialty regardless of duty position. Core task identified with an *R are optional for AFRC and ANG.

Course Objective List (COL). A publication identifying the tasks and knowledge requirements, and respective standards provided to achieve a 3-, 5-, and 7-skill level in this career field. Supervisors use the COL to assist in conducting graduate evaluations in accordance with AFI 36-2201, *Developing, Managing and Conducting Military Training Programs.*

Enlisted Specialty Training (EST). A mix of formal training (technical school) and informal training (on-the-job) to qualify and upgrade airmen in each skill level of a specialty.

Exportable Training. Additional training via computer assisted, paper text, interactive video, or other necessary means to supplement training.

Field Technical Training (Type 4). Special or regular on-site training conducted by a training detachment (TD) or by a mobile training team (MTT).

Initial Skills Training. A formal resident course which results in award of a 3-skill level AFSC.

Instructional System Development (ISD). A deliberate and orderly process for developing, validating, and reviewing instructional programs that ensures personnel are taught the knowledge and skills essential for successful job performance.

Mission Ready Technician. A formal course which results in an airman receiving hands-on training and task certification of selected tasks so the individual will be immediately productive upon arrival at their first duty section.

Occupational Survey Report (OSR). A detailed report showing the results of an occupational survey of tasks performed within a particular AFS.

On-the-Job Training (OJT). Hands-on, over-the-shoulder training at the duty location used to certify personnel for both skill level upgrade and duty position qualification.

Qualification Training (QT). Actual hands-on task performance training designed to qualify an airman in a specific duty position. This training occurs both during and after the upgrade training process. It is designed to provide the performance skill/knowledge training required to do the job.

Qualification Training Package (QTP). An instructional package designed for use at the unit to qualify, or aid qualification, in a duty position or program, or on a piece of equipment. It may be printed, computer-based, or in other audiovisual media.

Resource Constraints. Resource deficiencies, such as money, facilities, time, manpower, and equipment that preclude desired training from being accomplished.

Specialized Training Package and COMSEC Qualification Training Package. A composite of lesson plans, test material, instructions, policy, doctrine, and procedures necessary to conduct training. These packages are prepared by AETC, approved by National Security Agency (NSA), and administered by qualified communications security (COMSEC) maintenance personnel.

Specialty Training Standard (STS). An Air Force publication that describes an Air Force Specialty in terms of tasks and knowledge an airman may be expected to perform or to know on the job. It serves as a contract between the Air Education and Training Command and the functional user to show which of the overall training requirements for an Air Force Specialty Code are taught in formal schools, career development courses, and exportable courses.

Training Impact Decision System (TIDES). A computer-based decision support technology being designed to assist AFCFMs in making critical judgments relevant to what training should be provided personnel within career fields, when training should be provided (at what career points), and where training should be conducted (training setting).

Upgrade Training (UGT). A mixture of mandatory courses, task qualification, QTPs, and CDCs required for award of the 3-, 5-, 7-, or 9-skill levels.

Utilization and Training Workshop (U&TW). A forum of MAJCOM Air Force Specialty Code (AFSC) Functional Managers, Subject Matter Experts (SMEs), and AETC training personnel that determines career ladder training requirements.

SECTION A - GENERAL INFORMATION

1. Purpose. This CFETP provides the information necessary for the Air Force Career Field Manager (AFCFM), MAJCOM functional managers (MFMs), commanders, training managers, supervisors, and trainers to plan, develop, manage, and conduct an effective career field training program. This plan outlines the training that individuals in AFSC 2A5X3B should receive to develop and progress throughout their career. This CFETP identifies initial skills, upgrade, qualification, advanced, and proficiency training. Initial skills training is the AFS specific training an individual receives upon entry into the Air Force or upon retraining into this specialty for award of the 3-skill level. This training is conducted by AETC at Sheppard AFB TX. Upgrade training identifies the mandatory courses, task qualification requirements, and correspondence course completion requirements for award of the 3-, 5-, 7-, and 9-skill levels. Qualification training is actual hands-on task performance training designed to qualify an airman in a specific duty position. This training program occurs both during and after the upgrade training process. It is designed to provide the performance skills/knowledge required to do the job. Advanced training is formal specialty training used for selected airmen. Proficiency training is additional training, either in-residence or exportable advanced training courses, or on-the-job training, provided to personnel to increase their skills and knowledge beyond the minimum required for upgrade. The CFETP has several purposes, some are:

1.1. Serves as a management tool to plan, manage, conduct, and evaluate a career field training program. Also, it is used to help supervisors identify training at the appropriate point in an individual's career.

1.2. Identifies tasks and knowledge training requirements for each skill level in the specialty and recommends education/training throughout each phase of an individual's career.

1.3. Lists training courses available in the specialty and identifies sources of training, and the training delivery method.

1.4. Identifies major resource constraints which impact full implementation of the desired career field training process.

2. Uses. This plan will be used by MFMs and supervisors at all levels to ensure comprehensive and cohesive training programs are available for each individual in the specialty.

2.1. AETC training personnel will develop/revise formal resident, non-resident, Training Detachment (TD), and exportable training based upon requirements established by the users and documented in Part II of the CFETP. They will also work with the AFCFM to develop acquisition strategies for obtaining the resources needed to provide the identified training.

2.2. MFMs ensure their training programs complement the CFETP mandatory initial, upgrade, and proficiency requirements. Identified requirements can be satisfied by OJT, resident training, contract training, or exportable courses. MAJCOM developed training, to support this AFSC, must be identified for inclusion in this plan and must not duplicate other available training resources.

2.3. Each individual will complete the mandatory training requirements specified in this plan. The list of courses in Part II will be used as a reference to support training.

3. Coordination and Approval. The AFCFM is the approving authority. The using MAJCOM representatives and AETC training personnel will identify and coordinate on the career field training requirements. The AETC training manager for AFSC 2A5X3B will initiate an annual review of this document by AETC and MAJCOM AFSC functional managers to ensure currency and accuracy. Using the list of courses in Part II, they will eliminate duplicate training.

SECTION B - CAREER FIELD PROGRESSION AND INFORMATION

4. Specialty Descriptions.

4.1 Specialty Summary (Apprentice-Craftsman): Performs and supervises aircraft instrument and flight control (IFC) maintenance activities. Troubleshoots, inspects removes, installs, repairs, modifies and operates IFC systems, components and associated support equipment.

4.2. Duties and Responsibilities:

4.2.1. B-1/B-2 Instrument and Flight Control Systems Apprentice and Journeyman (2A533B/53B): Performs organizational maintenance to support aircraft instrument and flight control systems such as; flight instruments, flight director, fuel center of gravity management, computer controlled primary and secondary flight controls, wing fairings, and automatic flight control system (AFCS). Operates equipment to determine condition. Identifies, isolates, and repairs malfunctions utilizing hand tools; support equipment (SE); test, measurement, diagnostic equipment (TMDE); and Built-In-Test (BIT)/Ground Readiness Test (GRT) functions. Traces logic flow, signal flow, schematic and wiring diagrams. Removes, installs, aligns, programs, modifies and inspects instrument and flight control systems. Inspects, repairs, aligns, calibrates, and functionally checks aircraft line replaceable units (LRUs). Maintains, inspects, performs preventive maintenance and repairs SE. Repairs and fabricates wiring harnesses, interconnecting cables and multi-connector cables. Maintains maintenance and inspection records. Records information on maintenance data collection forms. Enters data into automated systems. Recommends methods to improve equipment performance and maintenance procedures. Handles, labels, and disposes of hazardous materials and waste according to environmental standards.

4.2.2. Instrument and Flight Control Systems Craftsman (2A573B): Supervises, performs maintenance, conducts /certifies training in the maintenance of instrument and flight control systems. Analyzes and interprets layout drawings, schematics and on-board/ground-based computerized fault detection systems data to diagnose difficult maintenance problems. Identifies maintenance problem areas from maintenance data collection systems and recommends corrective action. Interprets inspection findings for corrective action. Evaluates proposed modifications. Interprets maintenance operating instructions and procedures for the instrument and flight control systems.

4.2.3. Aerospace Maintenance Superintendent (2A590): Plans, organizes, and directs maintenance activities. Establishes production controls and work standards. Analyzes reports on maintaining, installing, removing, and repairing aircraft systems to improve work methods and repair techniques. Plans physical layout of facilities. Provides for spare parts, test equipment, and other resources necessary for aircraft maintenance. Coordinates with supply, operations, and maintenance activities to improve procedures and resolve problems. Directs and controls the inspection, adjustment, removal, replacement and calibration of internal and external mounted aircraft equipment. Directs repair of aircraft systems. Establishes and checks inspection

procedures. Determines extent and economy of repairs required. Inspects activities to solve maintenance, supply, and personnel problems. Analyzes inspection findings and recommends corrective actions. Solves problems and interprets operational and technical directives to ensure quality maintenance for mission requirements. Determines funding requirements and develops budgets. Advises and briefs commanders and senior staff members on all maintenance related activities. Ensures hazardous materials and waste are handled, stored, and disposed of according to environmental standards.

5. Career Skill Progression. Adequate training and timely progression from the apprentice to the superintendent skill level play an important role in the Air Force's ability to accomplish its mission. It is essential for everyone involved in training to do their part to plan, develop, manage, and conduct an effective training program. The guidance provided in this part of the CFETP will ensure each individual receives necessary training at appropriate points in their career. The following narrative and AFSC 2A5X3B Career development Flowcharts identify the career skill level progression.

5.1. Apprentice (3-level): Upon completion of initial skills training, a trainee will work with a trainer to enhance their knowledge and skills. They will utilize the Career Development Course, Task Qualification Training, and available exportable courses for continued advancement. Once task certified, a trainee may perform the task unsupervised. Apprentices can be considered for appointment as unit trainers after completion of a formal trainer course.

5.2. Journeyman (5-level): Once upgraded to the 5-level, a journeyman will enter into continuation training to broaden their experience base. Journeymen may be assigned job positions such as quality assurance and various staff positions. Journeymen should complete available FTD courses and MAJCOM specific training. Individuals will attend the Airman Leadership School (ALS) after having 48 months in the Air Force. Journeymen will be considered for appointment as unit trainers after completion of a formal trainer course. Individuals will use their CDCs to prepare for promotion testing. They should also consider continuing their education toward a Community College of the Air Force (CCAF) degree. Time lines and requirements may vary for ANG and AFRC.

5.3. Craftsman (7-level): A craftsman can expect to fill various supervisory and management positions such as shift leader, element chief, flight/section chief, and task certifier. They can also be assigned to work in staff positions. Craftsmen should take courses to obtain added knowledge on management of resources and personnel. Continued academic education through CCAF and higher degree programs is encouraged. In addition, when promoted to TSgt, individuals will complete the Noncommissioned Officer Academy.

5.4. Superintendent (9-level): A 9-level can be expected to fill positions such as flight NCOIC, production supervisor, and various staff NCOIC jobs. Additional training in the areas of budget, manpower, resources, and personnel management should be pursued through continuing education. Individuals promoted to SMSgt will complete the Senior Noncommissioned Officer Academy. Additional higher education and completion of courses outside their career AFSC are also recommended.

6. **Training Decisions:** The CFETP uses a building block approach (simple to complex) to encompass the entire spectrum of training requirements for the Instrument and Flight Control Systems career field. This includes a strategy for when, where, and how to meet these training requirements. The strategy must ensure we develop affordable training, eliminate duplication,

and prevent a fragmented approach to training. The following training decisions were made by the MAJCOM Functional Manager and Subject Matter Experts (SMEs) at the career field Utilization and Training Workshop held at Sheppard AFB, 17-21 May 99.

6.1. Initial Skills: The Central Integrated Test Systems (CITS), and Master Caution Panel were moved from A shred to B shred. A B-1, B-2 , B-52 course was to be created using the current B-1 B-shred course as a starting point. Representative systems were chosen depending on characteristics and agreements on what would provide the best training.

6.2. Five-Level Upgrade Training: The Career Development Course (CDC) will consist of information form the current 2A4X1, 2A55B1, 2A55B2 and 2A55B3. The CDC volumes will be developed with a targeted activation date to the field of 1 September 2000. The revised 3-level course is required to start NLT May 2000.

6.3. Seven-Level Upgrade Training. There are no current AFSC-specific 7-level CDC requirements for this career field. However, the Air Force Career Field Manager introduced and briefed the 2AX7X, Maintenance Supervision and Management CDC: Unit 1, Management Within the Maintenance Complex; Unit 2, Enlisted Specialty Training; Unit 3, Accountability for Records, Reports, and Forms; Unit 4, Supply Management; Unit 5, Logistics and Resource Management; and Unit 6, Computers and Computer Usage. The working group agreed to use this course as the career field's 7-level CDC.

6.4. Continuation Training. The purpose of the Continuation Training Program is to provide additional training exceeding minimum upgrade training requirements with emphasis on present and future duty positions. MAJCOMs develop a Continuation Training Program that ensures individuals in the Instrument and Flight Control Systems Career Field receive necessary training at the appropriate point in their career. The training program identifies both mandatory and optional training requirements.

7. Community College of the Air Force (CCAF) Academic Programs. Enrollment in CCAF occurs upon completion of basic military training. CCAF provides the opportunity to obtain an Associate in Applied Sciences Degree. In addition, CCAF offers the following:

7.1. Occupational Instructor Certification. Upon completion of instructor qualification training, consisting of the Basic Instructor Course (BIC) and supervised practice teaching, CCAF instructors who possess an associates degree or higher may be nominated by their school commander/commandant for certification as an occupational instructor.

7.2 Trade Skill Certification. When a CCAF student separates or retires, a trade skill certification is awarded for the primary occupational specialty. The college uses a competency based assessment process for trade skill certification at one of four proficiency levels; Apprentice, Journeyman, Craftsman/Supervisor, or Master Craftsman/Manager. All are transcribed on the CCAF transcript.

7.3. Degree Requirements: All airmen are automatically entered into the CCAF program to receive an Associates in Applied Technology Degree. Prior to completing an associates degree, the 5-level must be awarded and the following requirements must be met:

	Semester Hours
Technical Education	24
Leadership, Management, and Military Studies	6
Physical Education	4
General Education	15
Program Elective	15
Technical Education; Leadership, Management, and Military Studies; or General Education	
Total	64

7.3.1. Technical Education (24 Semester Hours): Completion of course J3ABR2A533B 001 satisfies 40 semester hours of the technical education requirement.

Technical Core

Subjects/Courses	Semester Hours
Avionic Systems Theory/Maintenance	40
CCAF Internship	16

Technical Electives

Subjects/Courses	Semester Hours
Advanced Electives	12
Leadership, Management, and Military Studies	6
Physical Education	4
General Education	15
Program Elective	15
Technical Education; Leadership, Management, and Military Studies; or General Education	
Total	64

7.3.2. Leadership, Management, and Military Studies (6 Semester Hours): Professional military education and/or civilian management courses. Refer to the CCAF General Catalog for application of courses to the Leadership, Management, and Military Studies area.

7.3.3. Physical Education (4 Semester Hours):

	Semester Hours
PHE 1000	4

7.3.4. General Education (15 Semester Hours): Courses must meet the definition of General Education subjects/courses as provided in the CCAF General Catalog.

Subjects/Courses	**Semester Hours**
Oral Communications (Speech)	3
Written Communication (English Composition)	3
Mathematics	3
Intermediate algebra or college-level mathematics course is required. If an acceptable mathematics course is applied as a Technical or Program Elective, a natural science course meeting GER application criteria may be applied as a General Education Requirement.	
Social Science	3
Anthropology, Archaeology, Economics, Geography, Government, History, Political Science, Psychology, Sociology	
Humanities	3
Fine Arts (History, Criticism, and Appreciation), Foreign Language, Literature, Philosophy, Religion	

7.3.5. Program Elective. (15 Semester Hours): Satisfied with applicable Technical Education; Leadership, Management, and Military Studies; or General Education subjects/courses, including natural science courses meeting GER application criteria. Six semester hours of CCAF degree-applicable technical credit otherwise not applicable to this program may be applied. See the CCAF General Catalog for details regarding the Associates of Applied Science for this specialty.

7.4. AETC Instructor Requirements. Additional off-duty education is a personal choice that is encouraged for all. Individuals desiring to become an Air Education and Training Command Instructor should be actively pursuing an associate's degree. It is necessary for instructors to have at least an associate's degree to ensure the Technical School maintains accreditation through the Southern Association of Colleges and Schools.

8. Career Field Path.

8.1. Enlisted Career Path. Table 8.1 identifies career milestones for the 2A5X3B Air Force Specialty.

Table 8.1 Enlisted Career Path

Education and Training Requirements	Grade Requirements			
	Rank	Average Sew-On	Earliest Sew-On	High Year Of Tenure (HYT)
Basic Military Training School				
Apprentice Technical School (3-Skill Level)	Amn A1C	6 months 16 months		
Upgrade To Journeyman (5-Skill Level) - Minimum 15 months on-the-job training. - Complete all 5-level core tasks on one MDS. - Complete appropriate CDC if/when available.	Amn A1C SrA	6 months 16 months 3 years	28 months	10 Years
Airman Leadership School (ALS) - Must be a SrA with 48 months time in service or be a SSgt Selectee. - Resident graduation is a prerequisite for SSgt sew-on (Active Duty Only).				
Trainer - Qualified and certified to perform the task to be trained. - Have attended the formal trainer's course and appointed in writing by Commander.	**Certifier** - Be at least a 5-skill level SSgt; and qualified and certified to perform the task being certified - Attend formal certifier course and appointed in writing by Commander. - Be a person other than the trainer.			
Upgrade To Craftsman (7-Skill Level) - Minimum rank of SSgt. - Complete all 5- and 7-level core tasks on one MDS. - 18 months OJT. - Complete appropriate CDC if/when available. - Advanced Technical School.	SSgt	7.5 years	3 years	20 Years
Noncommissioned Officer Academy (NCOA) - Must be a TSgt or TSgt Selectee. - Resident graduation is a prerequisite for MSgt sew-on (Active Duty Only).	TSgt MSgt	12.5 years 16 years	5 years 8 years	20 Years 24 Years
USAF Senior NCO Academy (SNCOA) - Must be a SMSgt or SMSgt Selectee. - A percentage of top nonselect (for promotion to E-8) MSgts attend the SNCOA each year. - Resident graduation is a prerequisite for CMSgt sew-on (Active Duty Only).	SMSgt	19.2 years	11 years	26 Years
Upgrade To Superintendent (9-Skill Level) - Minimum rank of SMSgt. - Must be a resident graduate of SNCOA (Active Duty Only).	CMSgt	21.5 years	14 years	30 Years

8.2. Base/Unit Education and Training Manager Checklist: Table 8.2. provides base and unit education and training managers a tool to track progress of individuals in the 2A5X3B Air Force Specialty.

Table 8.2. Base/Unit Education and Training Manager Checklist		
Requirements for Upgrade to:	**Y**	**N**
Journeyman - Has the apprentice completed mandatory CDCs if available? - Has the apprentice completed all 5-level core tasks on at least one MDS aircraft identified in the CFETP? - Has the apprentice completed all other duty position tasks identified by the supervisor? - Has the apprentice completed 15 months training (9 months for retrainees) for award of the 5-skill level? - Has the apprentice met mandatory requirements listed in specialty description, AFMAN 36-2108 (Airman Classification), and CFETP? - Has the apprentice been recommended by their supervisor?		
Craftsman - Has the journeyman achieved the rank of SSgt? - Has the journeyman completed mandatory CDCs? if available? - Has the journeyman completed all 5- and 7-level core tasks on at least one MDS aircraft identified in the CFETP? - Has the journeyman completed all other duty position tasks identified by the supervisor? - Has the journeyman attended 7-skill level Craftsman Course (if available)? **First, they must complete:** -- All 7-level training requirements listed in the CFETP. -- All applicable mandatory CDCs and /or exportable courses. -- A minimum of 12 months UGT (6 months for retrainees). - Has the journeyman completed a minimum of 18 months UGT (12 months for retrainees) for award of the 7-skill level?		

TO: Squadron/CC
FROM: Squadron Training Manager
SUBJECT: Upgrade Trainee

Trainee is prepared to be upgraded and has completed all mandatory training requirements. Supervisor recommends upgrade.

_____ _____

Training Manager Supervisor

SECTION C - SKILL LEVEL TRAINING REQUIREMENTS

9. Purpose. Skill level training requirements in this career field are defined in terms of tasks and knowledge requirements. This section outlines the specialty qualification requirements for each skill level in general terms and establishes the mandatory requirements for entry, award, and retention of each skill level. The specific task and knowledge training requirements are identified in the STS in Part II, Sections A and B of this CFETP.

10. Specialty Qualification. The various skill levels in this career field are defined in terms of tasks and knowledge proficiency requirements for each skill level. They are stated in broad general terms and establish the standards of performance. The specific task and knowledge training requirements are identified in the STS in Part II, Section A of the CFETP. Unit work centers must develop a structured training program to ensure the following requirements are met.

10.1. Apprentice Level Training.

10.1.1. Specialty Qualification: To perform duties at the apprentice level, an individual must be able to understand basic system theory of operation and be able to perform certain on-equipment tasks under close supervision until task certified.

10.1.1.1. Knowledge: A 3-level must be knowledgeable of: interpreting and applying mechanical, wiring, and electronic circuit diagrams; electronic, microelectronic, data bus, and mechanical principles theory and application; theory of flight, gyros, synchros, indicators, memory storage devices, antennas, servomechanisms; electromechanical and electro-optical devices; radar, radio frequency communication, dependent navigation aides, inertial and radar navigation, electronic countermeasure transmitters and receivers; lasers, infared/ultraviolet receivers; optics, automatic flight controls, instruments, multiplexing, and digital computer systems working principles; subsystem tie-in between integrated avionics systems; using and interpreting testing and measuring devices; principles of motion and power transmission by mechanical and electrical means; and concepts and application of maintenance directives.

10.1.1.2. Education: For entry into this specialty, completion of high school with courses in physics, computers, and mathematics is desirable.

10.1.1.3. Training: For award of AFSC 2A533B, completion of the applicable suffix basic avionics systems course is mandatory. Training to the 3-skill level consists of the initial skills courses which includes Electronic Principles conducted at Lackland AFB and AFSC specific training conducted at Sheppard AFB TX.

10.1.1.4. Experience: There is no experience necessary for entry into AFSC 2A5X3B.

10.1.1.5. Other: The following are mandatory as indicated:

10.1.1.5.1. For entry into this specialty, normal color vision as defined in AFI 48-123, *Medical Examination and Standards*.

10.1.1.5.2. For award and retention of AFSCs 2A533X/53X/73X, eligibility for a Secret security clearance according to AFI 31-501, *Personnel Security Program Management*.

10.1.2. Training Sources. The initial skills course, J3ABR2A533B 001, will provide required knowledge and qualifications. Initial skills training encompasses basic system theory of operation coupled with task performance as the learning foundation. This also includes training on system components, signal flow schematics, systems operational and GRT checks, introduction to maintenance, general flightline maintenance practices, use of technical publications, introduction to maintenance concepts and troubleshooting, maintenance

documentation with CAMS, support equipment familiarization and use, and general flightline aircraft maintenance practices.

10.1.3. Implementation. Upon graduation from Basic Military Training, airmen will attend course L3AQR2A533B-600, Electronic Principles at Lackland AFB, TX., then proceed to Sheppard AFB, TX. to complete the J3ABR2A533B-001, Instrument and Flight Control Systems Apprentice Course. Completion of both courses will result in award of the 3-skill level.

10.2. Journeyman Level Training:

10.2.1. Specialty Qualification: In addition to the 3-level qualifications:

10.2.1.1. Knowledge: An individual must possess the knowledge and skills necessary to maintain instrument and flight control systems equipment, perform basic troubleshooting and correct system malfunctions, remove and install system LRUs, repair and replace system wiring and other electrical components, perform operational checks and Built-In Tests (BITs),and use and maintain test and support equipment. They must also know how to handle, store, and dispose of hazardous waste and materials according to environmental standards.

10.2.1.2. Education: There is no formal education for upgrade to 2A553B.

10.2.1.3. Training: There are no formal training requirements.

10.2.1.4. Experience: Qualification in and possession of AFSC 2A533B. Experience performing or supervising functions such as installing, maintaining, or repairing aircraft instrument and flight control systems. Requirements for the Journeyman level include completion of the 5-level CDC and completion of all applicable 5-level core tasks on at least one MDS aircraft specified in the STS.

10.2.1.5. Other: The following are mandatory as indicated:

10.2.1.5.1. For entry into this specialty, normal color vision as defined in AFI 48-123, *Medical Examination and Standards*.

10.2.1.5.2. For award and retention of AFSCs 2A533X/53X/73X, eligibility for a Secret security clearance according to AFI 31-501, *Personnel Security Program Management.*

10.2.2. Training Sources and Resources. The 5-level CDC provides the career knowledge training required. Qualification training and OJT will provide training and qualification on the applicable core tasks identified in the STS. The CDC is written to build from the trainee's current knowledge base, and provides more in-depth knowledge to support OJT requirements.

10.2.3. Implementation. Training to the 5-level is performed by the units, utilizing the STS, exportable courses, and CDCs. Upgrade to the 5-level requires completion of the 2A553B, Instrument and Flight Control Systems Journeyman CDC, completion of all 5-level core tasks on one MDS aircraft, and MAJCOM/Unit requirements.

10.3. Craftsman Level Training (7-level):

10.3.1. Specialty Qualification. In addition to the 5-level qualifications:

10.3.1.1. Knowledge. An individual must possess advanced skills and knowledge of theory, concepts, principles and application as they apply to instrument and flight control systems. The 7-level must be able to supervise, train, and utilize resources to ensure effective maintenance. The 7-levels must be qualified on advanced repair and inspection techniques; component and system fault isolation; repair requirements, flightline procedures and evaluations; supervision, and historical documentation analysis.

10.3.1.2. Education. There are no additional education requirements beyond those defined for the apprentice level.

10.3.1.3. Training. For award of AFSC 2A573B, completion of the craftsman course is mandatory. The in-resident 7-level course, J3ACR2A573-001, is conducted at Sheppard AFB TX.
10.3.1.4. Experience. Completion of the 2AX7X CDC is mandatory for upgrade to AFSC 2A573B. Completion of all applicable 5- and 7-level core tasks on at least one MDS aircraft as identified in the STS, and qualification in and possession of AFSC 2A353B. Also, experience performing or supervising functions such as analyzing equipment operating characteristics to isolate malfunctions in flight controls and instrument systems is required.
10.3.1.5. Other. The following are mandatory as indicated:
10.3.1.5.1. For entry into this specialty, normal color vision as defined in AFI 48-123, *Medical Examination and Standards*.
10.3.1.5.2. For award and retention of AFSCs 2A533X/53X/73X, eligibility for a Secret security clearance according to AFI 31-501, *Personnel Security Program Management.*
10.3.2. Training Sources and Resources. 7-level upgrade training will be conducted by certified trainers using applicable core tasks, unit/MAJCOM specific courses, applicable 7-level CDC, and the formal 7-level course, J3ACR2A573-001. The resident courses and/or 7-level CDCs are written to provide advanced theory and troubleshooting skills. Qualification training packages/courses will also be developed and provided to the field units to help standardize OJT, enhance the training effort, and minimize the impact on productive man-hours.
10.3.3. Implementation. Upgrade to the 7-level will require completion of all applicable 5- and 7-level core tasks on one MDS aircraft, applicable 7-level CDCs, craftsmen maintenance course J3ACR2A573-001, and 18 months OJT after selection to SSgt.
10.4. Superintendent Level Training (9-Level).
10.4.1. Specialty Qualification. In addition to 7-level qualifications:
10.4.1.1. Knowledge. An individual must possess advanced skills and knowledge of concepts and principles in the management of aircraft maintenance. The 9-level needs to be an effective leader; must be able to forecast, budget and manage funds and other resources; and must be knowledgeable of all environmental standards and ensure adherence to the proper handling and disposal of hazardous materials.
10.4.1.2. Education. There are no additional requirements beyond those defined for the apprentice level.
10.4.1.3. Training. For award of AFSC 2A590, completion of applicable PME courses and promotion to SMSgt is mandatory
10.4.1.4. Experience. Qualification in and possession of AFSC 2A573B. Also experience managing or directing repair activities for Instrument and Flight Control Systems, and associated maintenance functions.
10.4.1.5. Other. Normal color vision as defined in AFI 48-123 is mandatory.
10.4.2. Training Sources and Resources. The senior NCO Academy and unit OJT will be used for training.
10.4.3. Implementation. The 9-level will be awarded after completing MAJCOM requirements, unit OJT and promotion to SMSgt. Individuals must attend the Senior NCO Academy after they are selected for promotion to SMSgt. ANG and AFRC personnel can use correspondence course. Individuals may also be awarded 9-level with completion of the SNCOA correspondence course as well.

SECTION D - RESOURCE CONSTRAINTS

11. Purpose: This section of the CFETP identifies known resource constraints which preclude optimum/desired training from being developed or conducted. Included is a narrative explanation of each resource constraint, an impact statement describing the effect on training, the resources needed, and actions required to satisfy the training requirements.

12. Constraints:

12.1. Constraint. The revised course was designed with the intent of using most of the current B-1/B-52 trainers to include: Safety Wire Trainer, AHRS trainer, autopilot trainer, SAS trainer, Pitot Static Trainer, CADC trainer, Engine Instrument Trainer, Coax Trainer, Thermo-Couple Trainer, Wire Maintenance Trainer, Fuel Quantity Trainer, AHRS Test Set, T-39 AIMS Pt/Ps Trainer, Control Surface Trainer, Aerodynamic Trainer, Fuel Flow Trainer, ADI trainer, Handtool applicator, Fuel Quantity Test Set, Mitac Gyro, TTU-205F.

12.1.1. Impact. Some training will not be completed to the required levels until resources from Keesler AFB can be made available. Some training will be accomplished on B-52 aircraft at Sheppard until the career field mergers in Oct 02 (tentative) take place.

12.1.2. Resources Required. B-52 trainers and equipment from Keesler AFB.

12.1.3. Action Required. Transfer equipment from 332 TRS to 365 TRS.

12.2.4. OPR/Target Completion Date. 332 TRS/TRR, 365 TRS/TRR and HQ AETC/DOOE. Completion date is estimated to be Oct 02.

12.2 Constraint. Training requirements to support transition to the Integrated Maintenance Data System (IMDS) were defined. Since IMDS will ultimately replace CAMS and GO81, these training requirements describe our approach to 3/5/7-level training and CDC content training.

12.2.1. Impact. Training and resource requirements on IMDS must be planned to ensure no interruptions in career field training. Current projections are for IMDS to be fielded to Sheppard AFB sometime in FY02. All training at Sheppard AFB will convert to using IMDS when Sheppard AFB is converted. At that point, the 2A3X2 training will use IMDS to the levels defined in part II. Training on CAMS will then revert solely to CBT and OJT. No later than Oct 01, the 5 level CDCs will include IMDS (Note: This date is dependent upon IMDS manuals and training being provided to the CDC writer). The CDCs will include both CAMS and IMDS until Oct 03. No later than Oct 03, the CAMS material will be deleted provided IMDS has largely completed fielding. CAMS material needs to be removed from WAPS testing effective FY04 cycle. **Note**: *If the fielding schedule is delayed or advanced, dates will change as appropriate.*

12.2.2. Resources Required. IMDS instructions and training. IMDS equipment.

12.2.3. Action Required. IMDS training will be projected and provided through the IMDS Training IPT. The 365 TRS will submit its IMDS equipment requirements to HQ AETC/XPRO. HQ AETC/XPRO will ensure that Sheppard AFB instructors and infrastructure are prepared to convert to IMDS training when Sheppard AFB is converted. AETC/XPRO will work these issues through the IMDS Training and Fielding IPTs. These actions must be accomplished to ensure career fields are smoothly transitioned to IMDS on schedule.

12.2.4. OPR/Target Completion Date. 365 TRS/TRR and HQ AF/ILMM. Completion date is estimated to be FY03.

12.3. Five-Level Training. There are no constraints.

12.4. Seven-Level Training. There are no constraints.

13. Supplemental Training. There are no constraints.

SECTION E. - TRANSITIONAL TRAINING GUIDE.

14. Transition Training Plan (Merging B-52 2A4X1 and ANG/AFRC 2A1X2 personnel): This training plan is effective immediately.

14.1. Transition Training

14.1.1. Initial Skills and Apprentice Training (3-levels): The basic 2A5X3B initial skill course will be about 70 academic days. The revised B shred course will be on-line NLT May 00 so students can graduate NLT 31 Oct 00. The 5 level CDCs will be revised and available NLT 31 Oct 00. The revised CDC will include current information from the existing 2A4X1, 2A55B1, 2A55B2, and 2A55B3 CDCs. Individuals will follow normal upgrade training. No special training is required for this conversion.

14.1.2. Journeymen/Craftsmen Training (5- and 7-levels): There is no required training for this conversion.

14.2. Implementation Plan

14.2.1. Conversion: All 2A4X1 (Active Duty/ANG/AFRC) and all ANG/AFRC 2A1X2 manning positions and personnel assigned to B-52 units will be directly converted to AFSC 2A5X3B. Personnel will be converted to AFSC 2A5X3B at their current skill level. Currently awarded AFSCs will be realigned using guidance in AFI 36-2101, paragraphs 3.1 and 3.2. HQ AFPC will determine the effective conversion date and provide detailed instructions.

14.2.2. SKT Exemption: HQ AF/ILMM will request a SKT exemption for all individuals for the 2001 test cycle.

14.2.3. Field Notification: HQ AFPC will determine the effective conversion date and notify field units. AFPC will provide detailed conversion instructions and other actions.

PART II

SECTION A - SPECIALTY TRAINING STANDARD

1. Implementation. This STS will be used for technical training provided by Air Education and Training Command (AETC) for classes beginning May 00.

2. Purpose. As prescribed in AFI 36-2201, this STS:
2.1. Lists in the column 1 (Task, Knowledge, and Technical Reference) the most common tasks, knowledge, and technical references (TR) necessary for airmen to perform duties in the 3-, 5-, and 7-skill level. An asterisk (*) before the number indicates a wartime course objective.
2.2. Identifies in column 2 (Core Tasks) by asterisk (*), specialty-wide training requirements. Core tasks identified with an *R are optional for the AFRC and the ANG. MAJCOM Functional Managers, commanders, and supervisors may designate additional core tasks as necessary. When designated, certify these core tasks using normal core task certification procedures. As a minimum, certification on all AFCFM directed core tasks applicable to the specialty must be completed for skill level upgrade. Exemptions:
2.2.1. Core tasks which are not applicable to base assigned aircraft or equipment are not required for upgrade (units are not required to send personnel TDY for core task training)
2.2.2. For units with more than one MDS aircraft, upgrade trainees need only complete core tasks on a single MDS. MFMs, unit commanders, and/or supervisors may require trainees to complete core task training on additional MDSs, if desired. If some of these core tasks involve training in another unit on base, trainees must still complete all core tasks relevant to at least one MDS. All units are bound by the requirements in this CFETP and will accommodate core task trainees from other units.
2.2.3. Units that use the GO81 maintenance data collection system do not need to complete Core Automated Maintenance System (CAMS) Computer Based Training (CBT) core tasks. However, these units must be capable of training CAMS related CBT core tasks for deployment preparation. This capability ensures GO81 users are capable of operating CAMS prior to deploying to CAMS using units. This requirement will remain in effect until GO81 and CAMS are converted to the Integrated Maintenance Data System (IMDS).
2.3. Provides certification for OJT. Column 3 is used to record completion of tasks and knowledge training requirements. Use automated training management systems to document technician qualifications, if available. Task certification must show a certification completed date.
2.4. Shows formal training and correspondence course requirements. Column 4 shows the proficiency to be demonstrated on the job by the graduate as result of training on the task/knowledge and the career knowledge provided by the correspondence course. When two codes are used in columns 4A and 4C(1) (e.g. 2b/b), the first code is the established requirement for resident training on the task/knowledge, and the second code indicates the level of training provided in the course due to equipment shortages or other resource constraints. See CADRE/AFSC/CDC listing maintained by the unit training manager for current CDC listing.
2.5. **Qualitative Requirements.** Attachment 1 contains the proficiency code key used to indicate the level of training and knowledge provided by resident training and career development courses.

2.6. **Job Qualification Standard**. Becomes a job qualification standard (JQS) for on-the-job training when placed in AF Form 623, **On-The-Job Training Record**, and used according to AFI 36-2201. For OJT, the tasks in column 1 are trained and qualified to the go/no go level. "Go" means the individual can perform the task without assistance and meets local requirements for accuracy, timeliness, and correct procedures. When used as a JQS, the following requirements apply:

2.6.1 **Documentation.** Document and certify completion of training IAW AFMAN 36-2247, Chapter 5. Automated records, utilizing Core Automated Management System (CAMS) or Integrated Maintenance Data System (IMDS)/Global Combat Support System (GCSS), reflecting this STS may be used and are highly encouraged. Use of attachments one, two and six is mandatory in individual training records along with CFETP Part I and Part II, Section A. Use of at least one of attachments three through five is required. Identify duty position requirements by circling (in pencil) the subparagraph number next to the task statement. As a minimum, complete the following columns in Part 2 of the CFETP: date training completed, trainee initials, trainer initials, and certifier initials (core tasks only). Trainers may sign off non-core and non-critical tasks by initialing the trainer's column; third party certification is not required for non-core and non-critical tasks. There are no approved AFJQS for this AFSC.

2.6.1.1. **Converting from Old Document to CFETP.** All AFJQSs and previous CFETPs are replaced by this CFETP; therefore, conversion of all training records to this CFETP STS is mandatory. Use this CFETP STS (or automated STS) to identify and certify all past and current qualifications.

2.6.1.1.1. For those core and critical tasks previously certified and required in the current duty position, evaluate current qualifications and when verified, recertify using current date as completion date, and enter trainee's and certifier's initials. Remember, during the transcription process no training is taking place. Therefore, the trainer's initials are not required.

2.6.1.1.2. For non-core and non-critical tasks previously certified and required in the current duty position, evaluate current qualifications and when verified, recertify using current date as completion date, and enter trainee's and trainer's initials.

2.6.1.1.3. When transcribing previous certification for tasks not required in the current duty position, carry forward only the previous completion date of certification (not the initials of another person). If and when transcribed tasks become duty position requirements, recertify using standard certification procedures.

2.6.1.1.4. The person whose initials appear in the trainer or certifier block during the transcription process must meet the requirements of their respective roles.

2.6.1.1.5. Upon completion of the transcription process, give the old CFETP to the member.

2.6.1.2. **Documenting Career Knowledge.** When a CDC is not available: the supervisor identifies CFETP Part II training references that the trainee requires for career knowledge and ensures, as a minimum, that trainees cover the mandatory items in AFI 36-2108. For two-time CDC course exam failures: Supervisors identify all Part II items corresponding to the areas covered by the CDC. The trainee completes a study of references, undergoes evaluation by the task certifier, and receives certification on the CFETP Part II. ***Supervisors must document successful completion of career knowledge prior to submission of a CDC waiver.***

2.6.1.3. **Decertification and Recertification.** When an airman is found to be unqualified on a task previously certified for his or her position, the supervisor lines through the previous certification or deletes previous certification when using automated system. Appropriate remarks are entered on the AF Form 623A, **On-The-Job Training Record Continuation Sheet**,

as to the reason for decertification. The individual is recertified (if required) either by erasing the old entries and writing in the new or by using correction fluid/tape (if the entries were made in ink) over the previously certified entry.

2.6.2. **AF Form 797.** When additional items not listed in the CFETP Part II are necessary in the current duty assignment, enter them on the AF Form 797. Fill out the form IAW AFMAN 36-2247.

2.6.3. **Disposition of Training Records.** Upon separation, retirement, commissioning, or promotion to Master Sergeant (unless otherwise directed by the AFCFM, MAJCOM, unit commander, or supervisor), give the individual their training records. Also, give individuals outdated training records after transcribing records. Do not remove any training records that show past qualifications unless transcribed to a new CFETP/AFJQS. For example, an individual working in a tool crib must maintain documented career field qualifications in case they return to duty on the flightline or in the shop. Supervisors must exercise good judgment when removing training records not needed in current duty positions.

2.7. **Specialty Training Standard.** Is a guide for development of promotion tests used in the Weighted Airman Promotion System (WAPS). Specialty Knowledge Tests (SKTs) are developed at the USAF Occupational Measurement Squadron by senior NCOs with extensive practical experience in their career fields. The tests sample knowledge of STS subject matter areas judged by test development team members as most appropriate for promotion to higher grades. Questions are based upon study references listed in the WAPS catalog. Individual responsibilities are in chapter 14 of AFI 36-2606, *US Air Force Reenlistment, Retention, and NCO Status Programs*. WAPS is not applicable to the Air National Guard or Air Force Reserve.

3. Recommendations. Report unsatisfactory performance of individual course graduates to the AETC training manager at 365 TRS/TRR, 609 9th Avenue Stop 242, Sheppard AFB TX, 76311-2335, DSN 736-7899. Reference specific STS paragraphs. For a quick response to problems, call our customer service information line, DSN 736-2574.

BY ORDER OF THE SECRETARY OF THE AIR FORCE

OFFICIAL

JOHN W. HANDY, Lieutenant General, USAF
DCS/Installations and Logistics

6 Attachments
1. Proficiency Code Key (Mandatory in records with CFETP Part I and Part II, Section A)
2. Common Task Training Requirements (Mandatory)
3. B-1 Training Requirements (Optional)
4. B-2 Training Requirements (Optional)
5. B-52 Peculiar Requirements (Optional)
6. Electronic Fundamentals/Applications (Mandatory)

NOTE: Use of at least one of attachments three through five is required.

Name Of Trainee		
Printed Name (*Last, First, Middle Initial*)	Initials (Written)	SSAN
Printed Name Of Training/Certifying Official And Written Initials		
N/I	***N/I***	
N/I	***N/I***	
N/I	***N/I***	
N/I	***N/I***	
N/I	***N/I***	
N/I	***N/I***	
N/I	***N/I***	
N/I	***N/I***	

QUALITATIVE REQUIREMENTS

Proficiency Code Key		
	Scale Value	Definition: The individual
Task Performance Levels	1	**IS EXTREMELY LIMITED** (Can do simple parts of the task. Needs to be told or shown how to do most of the task.)
	2	**IS PARTIALLY PROFICIENT** (Can do most parts of the task. Needs only help on hardest parts.)
	3	**IS COMPETENT** (Can do all parts of the task. Needs only a spot check of completed work.)
	4	**IS HIGHLY PROFICIENT** (Can do the complete task quickly and accurately. Can tell or show others how to do the task.)
*Task Knowledge Levels	a	**KNOWS NOMENCLATURE** (Can name parts, tools, and simple facts about the task.)
	b	**KNOWS PROCEDURES** (Can determine step by step procedures for doing the task.)
	c	**KNOWS OPERATING PRINCIPLES** (Can identify why and when the task must be done and why each step is needed.)
	d	**KNOWS ADVANCED THEORY** (Can predict, isolate, and resolve problems about the task.)
**Subject Knowledge Levels	A	**KNOWS FACTS** (Can identify basic facts and terms about the subject.)
	B	**KNOWS PRINCIPLES** (Can identify relationship of basic facts and state general principles about the subject.)
	C	**KNOWS ANALYSIS** (Can analyze facts and principles and draw conclusions about the subject.)
	D	**KNOWS EVALUATION** (Can evaluate conditions and make proper decisions about the subject.)

Explanations

***** A task knowledge scale value may be used alone or with a task performance scale value to define a level of knowledge for a specific task. (Example: b and 1b)

** A subject knowledge scale value is used alone to define a level of knowledge for a subject not directly related to any specific task, or for a subject common to several tasks.

\- This mark is used alone instead of a scale value to show that no proficiency training is provided in the courses or CDCs.

/ This mark is used in course columns to show that training is required but not given/reduced due to limitations in resources (3c/b, 2b/b, 3c/-, etc.).

Note: All course requirements are trained in the 3-level resident wartime course. The 7 level in-residence course is not taught in wartime.

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
ATTACHMENT 2											
NOTE 1: All course requirements are trained in the 3-level resident wartime course. The 7 level in-residence course is not taught in wartime.											
NOTE 2: Users are responsible for annotating training references to identify current references pending STS revision.											
NOTE 3: Items marked in columns 2a or 2b marked with a (*R) are optional core tasks for ANG and AFRC.											
NOTE 4: Address comments and recommended changes through the MAJCOM Functional Managers to the AETC Training Manager, DSN 736-7899.											
A2.1. CAREER LADDER PROGRESSION											
A2.1.1. Progression in career ladder 2A5X3B TR: AFI 36-2108, AFVA 39-1								-	-	-	-
A2.1.2. Duties of 3-, 5-, and 7-level personnel TR: AFI 36-2108								-	-	-	-
A2.2. SECURITY											
A2.2.1. Information Security TR: AFI 31-401, 31-501, AFPD 31-4, 31-5, Applicable directives											
A2.2.1.1. Classification of information								-	-	-	-
A2.2.1.2. Prevention of security violations								-	-	-	-
A2.2.1.3. Access to classified information								-	-	-	-
A2.2.2. Physical Security TR: AFR 207-4											
A2.2.2.1. Control of restricted areas								-	-	-	-
A2.2.2.2. Security alert reporting								-	-	-	-
A2.2.2.3. Make entries on cabinet, safes, and room security forms								-	-	-	-
A2.2.2.4. Proper handling of classified materials								-	-	-	-
A2.2.3. Communications Security (COMSEC) TR: AFI 31-401, DOD 5200.1-4											
A2.2.3.1. COMSEC Education Program								-	-	-	-
A2.2.3.2. Specific 2A5X3XB vulnerabilities								A	-	-	-
A2.2.4. Operations Security (OPSEC) TR: AFI 10-1101, AFPD 10-11; Applicable directives											
A2.2.4.1. Goals of OPSEC program								-	-	-	-
A2.2.4.2. Relationship to other programs								-	-	-	-
A2.2.4.3. Specific 2A5X3B vulnerabilities								A	-	-	-
A2.2.4.4. Function of CILs (Critical Information Lists)								a	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A2.2.5. Computer security (COMPUSEC)								-	-	-	-
A2.3. AF OCCUPATIONAL SAFETY AND HEALTH (AFOSH) PROGRAM TR: AFI 91-400 series; TOs 312-10-4, 33-1-32											
A2.3.1. AFOSH standards for AFSC 2A5X3B								A	-	-	C
A2.3.2. Maintain safe work area								-	-	-	-
A2.3.3. Hazards/Safety Practices of AFSC 2A5X3B											
A2.3.3.1. RF energy								A	-	-	-
A2.3.3.2. Noise								A	-	-	-
A2.3.3.3. Compressed gases								A	-	-	-
A2.3.3.4. Electrical power								A	-	-	-
A2.3.3.5. Hydraulic power								A	-	-	-
A2.3.3.6. Hazardous liquids								A	-	-	-
A2.3.3.7. Radioactive parts and materials								A	-	-	-
A2.3.3.8. Aircraft								-	-	-	-
A2.3.3.9. AGE equipment								-	-	-	-
A2.3.3.10. Electrical equipment								A	-	-	-
A2.3.4. Practice FOD prevention								A	-	-	-
A2.3.5. AF Nuclear Surety Program								-	-	-	-
A2.4. HAZARDOUS MATERIALS AND WASTE HANDLING ACCORDING TO ENVIRONMENTAL STANDARDS TR: AFI 23-504, EPA State Regulations											
A2.4.1. Types of hazardous material /fluids								B	-	-	-
A2.4.2. Handling procedures								B	-	-	B
A2.4.3. Storage and labeling								B	-	-	-
A2.4.4. Proper disposal								B	-	-	B
A2.4.5. Material Safety Data Sheets								B	-	-	-
A2.5. MAINTENANCE MANAGEMENT TR: AFI-21-103											
A2.5.1. Purpose and function of the Maintenance Organization								-	B	B	-
A2.5.2. Maintenance Data Collection								B	B	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A2.6. MAINTENANCE AND INSPECTION SYSTEMS, FORMS TR: T0 00 Series											
A2.6.1. Maintenance systems								-	-	-	-
A2.6.2. Aircraft inspection systems								-	A	-	-
A2.6.3. Use Maintenance Data Collection Forms								2b	-	-	-
A2.6.4. Operate Core Automated Maintenance Systems (CAMS)											
A2.6.4.1 Create discrepancy	*							2b	-	-	-
A2.6.4.2. Schedule discrepancy	*							2b	-	-	-
A2.6.4.3. Defer discrepancy	*							2b	-	-	-
A2.6.4.4. Transfer discrepancy	*							2b	-	-	-
A2.6.4.5. Sign off discrepancy											
A2.6.4.5.1. Cannibalization		*						2b	-	-	-
A2.6.4.5.2. Action taken code “P”	*							2b	-	-	-
A2.6.4.5.3. Action taken code “Q”	*							2b	-	-	-
A2.6.4.5.4. Action taken code “R”	*							2b	-	-	-
A2.6.4.5.5. Special Inspections								2b	-	-	-
A2.6.4.5.6. Maintenance transactions								-	-	-	-
A2.6.4.5.7. Supply transactions								-	-	-	A
A2.6.4.5.8. Maintenance/Supervision Transactions								-	-	-	A
A2.6.4.6. Use Integrated Maintenance Data System (IMDS)								-	-	-	A
A2.6.5. INTEGRATED MAINTENANCE DATA SYSTEM (IMDS) TR: AFI 21-101											
A2.6.5.1. IMDS training subsystem											
A2.6.5.1.1 Purpose of the IMDS training								A/-	B/-	B/-	-
A2.6.5.1.2. Document Master Task List (MTL)								-	-	B/-	-
A2.6.5.1.3. Perform Ad Hoc Inquiry								-	-	B/-	-
A2.6.5.1.4. Identify duty position requirements								-	-	B/-	-
A2.6.5.1.5. Document task certification								a/-	B/-	B/-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A2.6.5.2. IMDS Maintenance Data Collection (MDC)											
A2.6.5.2.1. Purpose of MDC process								A/-	B/-	-	-
A2.6.5.2.2. Use IMDS to:											
A2.6.5.2.2.1. Create jobs	*							3c/-	-	-	-
A2.6.5.2.2.2 Transfer jobs	*							2b/-	-	-	-
A2.6.5.2.2.3. Clear jobs	*							3c/-	-	-	-
A2.6.5.2.2.4. Document component maintenance actions	*							3c/-	-	-	-
A2.6.5.2.2.5. Document Cannibalization	*							3c/-	-	-	-
A2.6.5.2.2.6. Use Portable Maintenance Aid (PMA)	*							3c/-	-	-	-
A2.6.5.2.2.7. Order parts	*							2b/-	-	-	-
A2.6.5.2.2.8. Review maintenance status	*							3c/-	-	-	-
A2.6.5.2.2.9. Review equipment status	*							3c/-	-	-	-
A2.6.5.3. Other Automated Maintenance System (RAMPOD and GO 81)								-	-	-	A
A2.6.5.4. Access and print all open events assigned to workcenter								2b	-	-	-
A2.6.6. Deficiency Reporting System TR: 00-35D-54											
A2.6.6.1. Concept of								-	B	-	-
A2.6.6.2. Use								-	-	3c	-
A2.6.6.3. Initiate software improvement/deficiency report								-	-	-	-
A2.6.7. Use aircraft/equipment maintenance forms											
A2.6.7.1. 781A								2b	-	-	B
A2.6.7.2. 781B								-	-	-	B
A2.6.7.3. 781C								-	-	-	B
A2.6.7.4. 781K								2b	-	-	B
A2.6.7.5. 781L								-	-	-	B
A2.6.7.6. Form 244/245								-	-	-	B
A2.6.7.7. AF Form 1492								-	-	-	-
A2.6.8. Historical Records								-	-	-	B
A2.6.9. Status Reports								-	-	-	B
A2.6.10. Configuration Management								-	-	-	B

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A2.7. SUPERVISION											
A2.7.1. Orient new personnel TR: AFI-36-2108, 36-2201								-	-	-	-
A2.7.2. Assign personnel to work assignments								-	-	-	-
A2.7.3. Plan work assignments and priorities								-	-	-	-
A2.7.4. Schedule work assignments and priorities								-	-	-	-
A2.7.5. Coordinate work assignments TR: AFIs 36-2123, 21-101, 21-144, Applicable Command Directives								-	-	-	-
A2.7.6. Establish TR: AFIs 21-101, 21-114, Applicable Command Directives											
A2.7.6.1. Work methods								-	-	-	-
A2.7.6.2. Controls								-	-	-	-
A2.7.6.3. Performance Standards								-	-	-	-
A2.7.7. Evaluate work performance of subordinate personnel								-	-	-	-
A2.7.8. Help resolve technical problems for subordinate personnel								-	-	-	-
A2.7.9. Initiate actions to correct substandard performance TR: AFIs 36-2503, -2907, -3202, -3208								-	-	-	-
A2.7.10. Counsel personnel and help resolve individual problems TR: AFP 36-2618								-	-	-	-
A2.7.11. Supervise											
A2.7.11.1. Maintenance actions								-	-	-	-
A2.7.11.2. Inspection action								-	-	-	-
A2.7.12. Utilize											
A2.7.12.1. Maintenance reports								-	-	-	-
A2.7.12.2. Inspection reports								-	-	-	-
A2.7.13. Prepare											
A2.7.13.1. Maintenance inspection reports and charts								-	-	-	-
A2.7.13.2. Organization and functional charts								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A2.7.14. Justify TR: AFIs 21-101, 21-114											
A2.7.14.1. Personnel manning requirements								-	-	-	-
A2.7.14.2. Equipment Authorizations								-	-	-	-
A2.7.15. Recommend policy changes on use of TR: AFRs 67-10, 177-11; DOD 7200.10M											
A2.7.15.1. Personnel								-	-	-	-
A2.7.15.2. Equipment								-	-	-	-
A2.7.16. Statement of charges TR: AFRs 67-10, 177-11; DOD 7200.10M								-	-	-	-
A2.7.17. Perform reports of survey TR: AFR 17-111; DOD 7200.10M								-	-	-	-
A2.7.18. Aircraft Scheduling TR: AFI 21-103											
A2.7.18.1. Utilize flow charts								-	-	-	-
A2.7.18.2. Status reporting								-	-	-	-
A2.7.18.3. Flying/maintenance planning								-	-	-	-
A2.7.19 Maintenance mobility planning								-	-	-	-
A2.7.20. Maintenance accountability								-	-	C	B
A2.8. TRAINING TR: AFI 36-2201											
A2.8.1. Evaluate personnel for need of training								-	-	-	-
A2.8.2. Plan and supervise training											
A2.8.2.1. Prepare JQSs								-	-	-	-
A2.8.2.2. Conduct Training								-	-	-	-
A2.8.2.3. Counsel Trainees on their progress								-	-	-	-
A2.8.2.4. Provide motivation for trainers and trainees								-	-	-	-
A2.8.2.5. Monitor effectiveness of training											
A2.8.2.5.1. Career knowledge upgrade								-	-	-	-
A2.8.2.5.2. Job proficiency upgrade								-	-	-	-
A2.8.2.5.3. Qualification Training								-	-	-	-
A2.8.2.6. Maintain training records								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A2.8.2.7. Develop training programs								-	-	-	-
A2.8.2.8. Evaluate effectiveness of training programs								-	-	-	-
A2.8.2.9. Recommend personnel for training								-	-	-	-
A2.8.3. OJT trainer requirements											
A2.8.3.1. Prepare teaching outlines of tasks breakdowns								-	-	-	-
A2.8.3.2. Provide trainees theory and train on actual equipment								-	-	-	-
A2.8.3.3. Provide feedback on training provided								-	-	-	-
A2.8.4. OJT task certifier requirements											
A2.8.4.1. Develop methods of evaluation to determine trainee knowledge/ qualification and training effectiveness								-	-	-	-
A2.8.4.2. Use appropriate method of evaluation and effectively determine trainee's ability								-	-	-	-
A2.8.4.3. Provide supervisor and trainee feedback on results of training provided, and trainee's strengths/weakness								-	-	-	-
A2.9. TECHNICAL PUBLICATIONS TR: TOs 0-1-01, 00-5-1, 00-5-2, 00-5-15, 00-5-17, 00-5-18, 00-20-1, 00-20-5, 80-00-1											
A2.9.1. Scope and application of the technical order system								A	B	-	-
A2.9.2. Use technical order indexes								-	-	-	-
A2.9.3. Use technical orders								2b	-	-	-
A2.9.4. Scope and application of technical order improvement/deficiency report								-	B	-	-
A2.9.5. Initiate technical order improvement/ deficiency report								a	-	-	-
A2.9.6. Scope and application of the Computer Program Identification Number (CPIN) system								-	B	-	-
A2.9.7. Use CPIN compendium								-	-	-	-
A2.9.8. Time Compliance Technical Order								-	-	-	B
A2.9.9. Maintain technical order files								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A2.10. SUPPLY DISCIPLINE TR: AFI 21-101, AFMAN 23-110, ACCI 21-101											
A2.10.1. Property accountability and responsibility								A	B	-	-
A2.10.2. Principles of equipment authorization and management											
A2.10.3. Special requisitions								-	-	-	-
A2.10.4. Back order verification								-	-	C	-
A2.10.5. Use equipment condition tags								b	-	-	-
A2.10.6. Use microfiche/computer based programs								-	-	-	-
A2.10.7. Use issue/turn-in requests								b	-	-	-
A2.10.8. Use of supply management reports								-	-	-	B
A2.11. FUNDAMENTALS OF AVIONICS SYSTEMS MAINTENANCE-ON EQUIPMENT TR: Applicable aircraft –1 and –2 series TOs											
A2.11.1. Fundamentals of Flight								B	B	-	-
A2.11.2 Perform nuclear hardness maintenance and inspections TR: Applicable system JG-00-1, 1-1A-14								2b	-	-	-
A2.11.3. Use common hardware TR: AFI 91-408, TOs Applicable aircraft -4, 1-1A-8								2b	-	-	-
A2.11.4. Use common tools TR: AFI 91-408, TOs 00-25-234, 32-1-1, 32-1-2, 32-1-101, 32-1-211								2b	-	-	-
A2.11.5. Use torque indicating devices	*							3c	-	-	-
A2.11.6. Use special purpose tools								-	-	-	-
A2.11.7. Protect electrostatic devices								b	B	-	-
A2.11.8. Identify corrosion								A	-	-	-
A2.11.9 Use safetying devices								-	-	-	-
A2.11.10. Inspect aircraft systems for safe and secure installation								-	-	-	-
A2.11.11. Removal and installation of radar absorption material (RAM)								-	-	-	-
A2.11.12. Operate motorized maintenance stands								-	-	-	-
A2.11.13. Operate crane								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A2.11.14. Launch/Recover aircraft								-	-	-	-
A2.11.15. Tow aircraft								-	-	-	-
A2.11.15.1. Wing/Tail walker								-	-	-	-
A2.11.15.2. Brake operator								-	-	-	-
A2.11.15.3. Tow supervisor								-	-	-	-
A2.11.15.4. Tow vehicle operator								-	-	-	-
A2.11.16. Perform aircraft phase inspection								-	-	-	-
A2.11.17. Maintain tool crib								-	-	-	-
A2.11.18. Debrief TR: ACCI 21-101, 1B-1B-2-00FR-00								A	-	-	-
A2.11.19. Dispatch maintenance crews								-	-	-	-
A2.11.20. Ensure aircraft is safe for simulated airborne conditions								-	-	-	-
A2.11.21. Perform proximity switch control covering/uncovering								-	-	-	-
A2.11.22. Use non-powered AGE								2b	-	-	-
A2.11.23. LRU removal/installation											
A2.11.23.1. Shock mounted								2b	-	-	-
A2.11.23.2. Tray mounted								2b	-	-	-
A2.11.23.3. Rack mounted								2b	-	-	-
A2.11.23.4. Console mounted								2b	-	-	-
A2.12. MULTIPLEX BUS											
A2.12.1. Theory of Operation								B	B	-	-
A2.12.2. Perform measurements with											
A2.12.2.1. Time Domain Reflectometer		*						2b	-	3c	-
A2.12.2.2. Serial Bus Analyzer								2b	-	-	-
A2.13. AIRCRAFT WIRING											
A2.13.1. Capton								B	B	-	-
A2.13.2. Multiconductor								B	B	-	-
A2.13.3. Coaxial/Triaxial								B	B	-	-
A2.13.4. Nuclear hardened								B	B	-	-
A2.13.5. Twisted Pair								B	-	-	-
A2.13.6. Single Conductor								B	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A2.14. PERFORM WIRE MAINTENANCE											
A2.14.1. Stripping								2b	-	-	-
A2.14.2. Splicing								2b	-	-	-
A2.14.3. Bundling								2b	-	-	-
A2.14.4. Strain Relief								2b	-	-	-
A2.14.5. Continuity Checks								2b	-	-	-
A2.14.6. Wire Repair								-	B	-	-
A2.14.7. Repair connectors								2b	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
ATTACHMENT 3											
NOTE 1: All course requirements are trained in the 3-level resident wartime course. The 7 level in-residence course is not taught in wartime.											
NOTE 2: Users are responsible for annotating training references to identify current references pending STS revision.											
NOTE 3: Items marked in columns 2A or 2B marked with a (*R) are optional core tasks for ANG and AFRC.											
NOTE 4: Address comments and recommended changes through the MAJCOM Functional Managers to the AETC Training Manager, DSN 736-7899.											
NOTE 5: Items coded in column 4A will be trained using B-1 aircraft/systems. If B-1 aircraft/systems are unavailable, representative systems from other aircraft may be used.											
A3.1. GENERAL ORGANIZATIONAL MAINTENANCE TR: TOs Applicable aircraft –1 and –2											
A3.1.1. Ensure aircraft safe for maintenance	*							2b/b	-	-	-
A3.1.2. Aircraft familiarization											
A3.1.2.1. Major structural areas								A	B	-	-
A3.1.2.2. Major systems								A	B	-	-
A3.1.2.3. Danger areas								A	B	-	-
A3.1.2.4. Operate A/C auxiliary power units (APUs)								-	-	-	-
A3.1.2.5. Apply external air conditioning	*							2b/b	-	-	-
A3.1.2.6. Apply external power	*							2b/b	-	-	-
A3.1.2.7. Apply hydraulic power								-	-	-	-
A3.1.2.8. Central Aircraft Support System (CASS)								-	-	-	-
A3.1.2.9. Perform selected classified data erase								-	-	-	-
A3.1.2.10. Stair ladder-exterior gravity extension								-	-	-	-
A3.1.2.11. Stair ladder-exterior electric extension and retraction								-	-	-	-
A3.1.2.12. Stair ladder-exterior manual extension and retraction								-	-	-	-
A3.1.2.13. Use ground intercommunications								-	-	-	-
A3.1.2.14. Use personnel safety harness								-	-	-	-
A3.1.2.15. Main landing gear doors, opening/closing								-	-	-	-
A3.1.2.16. Overwing fairing, opening/closing								-	-	-	-
A3.1.2.17. Tail radome, opening/closing								-	-	-	-
A3.1.2.18. Forward fuselage doors and panels								-	-	-	-
A3.1.2.19. Forward intermediate fuselage doors and panels								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.1.2.20. Aft intermediate fuselage doors and panels								-	-	-	-
A3.1.2.21. Aft fuselage doors and panels								-	-	-	-
A3.1.2.22. Stabilizer doors and panels								-	-	-	-
A3.1.2.23. Wing doors and panels								-	-	-	-
A3.1.2.24. Horizontal stabilizer fairing access panels								-	-	-	-
A3.1.2.25. Forward crew station rig pins installation/removal								-	-	-	-
A3.1.2.26. Horizontal stabilizer index set installation/removal								-	-	-	-
A3.1.2.27. Forward Crew Station Lighting Operational Check								-	-	-	-
A3.1.2.28. Aft Crew Station Lighting Operational Check								-	-	-	-
A3.1.3. Operate/maintain peculiar (Special Purpose) test equipment to perform maintenance functions											
A3.1.3.1. CITS EMUX Maintenance Unit (CEMU) TR: 33D7-75-35-1											
A3.1.3.1.1. Purpose and Interface								A	B	C	-
A3.1.3.1.2. Use aircraft monitor modes								-	-	-	-
A3.1.3.1.3. Use aircraft STIM Codes								-	-	-	-
A3.1.3.2. Use TTU 205								2b	-	-	-
A3.1.3.3. Use Fuel quantity test set								2b	-	-	-
A3.1.3.4. Use data bus analyzer								-	-	-	-
A3.2. AIRCRAFT SYSTEMS INTEGRATION											
A3.2.1. Purpose and Interface TR: 1B-1B-2-40GS-00-1								A	B	C	-
A3.2.2. Use wiring diagrams for fault isolation TR: 1B-1B-2-00WD-00-1		*						A	-	3c	-
A3.3. CENTRAL INTEGRATED TEST SYSTEM (CITS)											
A3.3.1. Purpose and Interface TR: TO 1B-1B-2-46GS-00-1								A	B	C	-
A3.3.2 Use parameter monitor codes for systems fault isolation TR: System GS-00-1	*							3c	-	-	-
A3.3.3. Use CITS data snapshots TR: TO 1B-1B-2-40JG-series		*						2b	-	c	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.3.4. Use CITS Expert Parameter System (CEPS/CITS Deployable Diagnostic System (CDDS) TR: TO 31S5-4-3593-1	*							2b	-	-	-
A3.3.5. Use printer tapes TR: TO 1B-1B-2-46GS-00-1								-	-	-	-
A3.3.6. Perform computer memory load TR: TO 1B-1B-2-46JG-30-1	*							-	-	-	-
A3.3.7. Load CITS airborne printer with tape								-	-	-	-
A3.3.8. Fault Isolate TR: TOs 1B-1B-2-40JG-46-1, -46GS-00-1, -46WD-00-1								-	-	-	-
A3.3.9. Remove and Install TR: TOs 1B-1B-2-46JG-10, -20, 30, -40											
A3.3.9.1. CITS Control and Display Panel (CCD) Task 46-11-10								-	-	-	-
A3.3.9.2. Data Acquisition Unit (DAU) Task 46-21-10								-	-	-	-
A3.3.9.3. Data Conversion Unit (DCU) Task 46-27-10								-	-	-	-
A3.3.9.4. Data Link Terminal (DLT) Task 46-26-10								-	-	-	-
A3.3.9.5. CITS digital computer Task 46-31-10								-	-	-	-
A3.3.9.6. CITS transformer Task 46-31-11								-	-	-	-
A3.3.9.7. CITS Maintenance Recorder (CMR)											
A3.3.9.7.1. Recorder control unit Task 46-41-10								-	-	-	-
A3.3.9.7.2. Recorder mounting unit Task 46-41-11								-	-	-	-
A3.3.9.7.3. Magnetic tape transport Task 46-41-12								-	-	-	-
A3.3.9.7.4. Recorder transformer Task 46-41-13								-	-	-	-
A3.3.9.8. CITS Airborne Printer (AP) Task 46-41-14								-	-	-	-
A3.4. Electrical Multiplexing System (EMUX) TR: TOs system GSs											
A3.4.1. Purpose and Integration								A	B	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.5. AVIONICS CONTROL UNIT COMPLEX (ACUC)											
A3.5.1. Purpose and Interface TR: TO 1B-1B-2-34GS-00-2								A	B	-	-
A3.5.2. Operate ACUC TR: TO 1B-1B-2-34JG-60-2	*							2b	-	-	-
A3.6. STANDBY INSTRUMENTS											
A3.6.1. Theory of Operation TR: 1B-1B-2-34GS-00-2								B	B	-	-
A3.6.2. Perform checkout procedures TR: 1B-1B-2-34JG series	*							2b	-	-	-
A3.6.3. Troubleshoot TR: 1B-1B-2-34GS-00-1, 34WD-00-1		*						2b	-	-	-
A3.6.4. Remove and Install (R&I)											
A3.6.4.1. Standby Airspeed Indicator TR: 1B-1B-2-34JG-10-3								-	-	-	-
A3.6.4.2. Standby Altimeter TR: 1B-1B-2-34JG-10-3								-	-	-	-
A3.6.4.3. Magnetic Compass TR: 1B-1B-2-34JG-10-3								-	-	-	-
A3.6.5. Adjust/Calibrate TR: 1B-1B-2-34JG-10-3											
A3.6.5.1. Standby Altimeter								-	-	-	-
A3.6.5.2. Magnetic Compass								-	-	-	-
A3.7. AUTOFLIGHT SYSTEMS											
A3.7.1. Theory of Operation TR: 1B-1B-2-22GS-00-1								B	B	-	-
A3.7.2. SEF DC Power Source Theory of Operation TR: 1B-1B-2-24GS-00-2								-	-	-	-
A3.7.3. SEF AC Power Source Theory of Operation TR: 1B-1B-2-24GS-00-2								-	-	-	-
A3.7.4. Perform Ground Readiness Tests (GRT)											
A3.7.4.1. AFCS GRT TR: 1B-1B-2-40JG-22-1, 40GRT-22-11								2b	-	-	-
A3.7.4.2. AFCS TF GRT TR: 1B-1B-2-40JG-1, 40GRT-22-13								-	-	-	-
A3.7.4.3. SMCS GRT TR: 1B-1B-2-40JG-22-1, 40GRT-22-21								-	-	-	-
A3.7.5. Perform checkout procedures											
A3.7.5.1. AFCS Operational Checkout TR: 1B-1B-2-22JG-10-1, 22-10-02-3	*							-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.7.5.2. Manual TF Operational Checkout TR: 1B-1B-2-22JG-10-1, 22-10-02-4		*						-	-	-	-
A3.7.5.3. SIS/SEF ground check TR: 1B-1B-2-27JG-30-1, 27-30-05		*						-	-	-	-
A3.7.5.4. Autothrottle Disconnect Switch Component Checkout TR: 1B-1B-2-76JG-10-1, 76-11-03								-	-	-	-
A3.7.6. Troubleshoot Autoflight TR: 1B-1B-2-22GS-00-1, 22WD-00-1, 24GS-00-2											
A3.7.6.1. AFCS		*						-	-	-	-
A3.7.6.2. Automatic TF		*						b	-	-	-
A3.7.6.3. SIS/SEF		*						b	-	-	-
A3.7.6.4. SMCS		*						-	-	-	-
A3.7.6.5. SEF DC Power Source								-	-	-	-
A3.7.6.6. SEF AC Power Source								-	-	-	-
A3.7.7. Remove and Install (R&I)											
A3.7.7.1. AFCS Trim Controller TR: 1B-1B-2-22JG-10-1, 22-11-10-2, -3								-	-	-	-
A3.7.7.2. AFCS Logic/SMCS Controller TR: 1B-1B-2-22JG-10-1, 22-12-10-2, -3								-	-	-	-
A3.7.7.3. AFCS Panel TR: 1B-1B-2-22JG-10-1, 22-12-11-2, -3								-	-	-	-
A3.7.7.4. Terrain Following Adapters TR: 1B-1B-2-22JG-10-1, 22-13-10-2, -3								-	-	-	-
A3.7.7.5. Manual Terrain Following Feedback Accelerometers TR 1B-1B-2-22JG-10-1, 22-13-11-2, -3								-	-	-	-
A3.7.7.6. Proximity Switch Electronics Package TR: 1B-1B-2-22JG-20-1, 22-21-10-2, -3								-	-	-	-
A3.7.7.7. SMCS Accelerometers TR: 1B-1B-2-22JG-20-1, 22-21-12-2, -3								-	-	-	-
A3.7.8. Perform Adjustments/Alignments											
A3.7.8.1. AFCS Logic/SMCS Controller TR: 1B-1B-2-22JG-10-1, 22-12-10-5								-	-	-	-
A3.8. FLIGHT CONTROL SYSTEMS											
A3.8.1. Theory of Operation TR: 1B-1B-2-27GS-00-1								B	B	-	-
A3.8.2. Perform Ground Readiness Tests (GRTs)											
A3.8.2.1. Pitch SCAS GRT TR: 1B-1B-2-40JG-27-1, 40GRT-27-05								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.8.2.2. Roll SCAS GRT TR: 1B-1B-2-40JG-27-1, 40GRT-27-10	*							2b	-	-	-
A3.8.2.3. Yaw SCAS GRT TR: 1B-1B-2-40JG-27-1, 40GRT-27-15								-	-	-	-
A3.8.2.4. Wing Sweep GRT TR: 1B-1B-2-40JG-27-1, 40GRT-27-20								-	-	-	-
A3.8.2.5. Flap/Slat GRT TR: 1B-1B-2-40JG-27-1, 40GRT-27-25	*							3c	-	-	-
A3.8.2.6. Spoiler GRT TR: 1B-1B-2-40JG-27-1, 40GRT-27-30								-	-	-	-
A3.8.2.7. Overwing Fairing GRT TR: 1B-1B-2-40JG-27-1, 40GRT-27-35								-	-	-	-
A3.8.2.8. SEF GRT TR: 1B-1B-2-40JG-27-1, 40GRT-27-40								-	-	-	-
A3.8.3. Perform operational checkouts											
A3.8.3.1. Roll Control Operational Checkout TR: 1B-1B-2-27JG-10-1, 27-10-01								-	-	-	-
A3.8.3.2. Yaw Control Operational Checkout TR: 1B-1B-2-27JG-20-1, 27-20-01								-	-	-	-
A3.8.3.3. Pitch Control Operational Checkout TR: 1B-1B-2-27JG-30-1, 27-30-01								-	-	-	-
A3.8.3.4. Linkage Shaker Motor Operational Checkout TR: 1B-1B-2-27JG-30-3, 27-34-11-1								-	-	-	-
A3.8.3.5. Control Stick Grip Operational Checkout TR: 1B-1B-2-27JG-30-03, 27-36-11-1								-	-	-	-
A3.8.3.6. Hinge Movement Limiting Operational Checkout TR: 1B-1B-2-27JG-40-1, 27-42-01								-	-	-	-
A3.8.3.7. Wing Sweep Operational Checkout TR: 1B-1B-2-27JG-80-1, 27-81-01								-	-	-	-
A3.8.3.8. Alternate Wing Sweep Operational Checkout TR: 1B-1B-2-27JG-80-1, 27-81-04								-	-	-	-
A3.8.3.9. Flap/Slat Operational Checkout TR: 1B-1B-2-27JG-80-4, 27-82-01								-	-	-	-
A3.8.3.10. Pitch Trim Actuator TR: 1B-1B-2-27JG-30-3, 27-36-10-1								-	-	-	-
A3.8.3.11. Horizontal Stabilizer Roll Trim Actuator TR: 1B-1B-2-27JG-10-4, 27-18-10-1								-	-	-	-
A3.8.3.12. Speedbrake/Spoiler Roll Trim Actuator TR: 1B-1B-2-27JG-10-4, 27-18-11-1								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.8.3.13. Yaw Trim TR: 1B-1B-2-27JG-20-3, 27-25-10-1								-	-	-	-
A3.8.3.14. Speed Brake Command Switch Component Checkout TR: 1B-1B-2-76JG-10-1, 76-11-02								-	-	-	-
A3.8.3.15. Flight Control Trim Panel Component Checkout TR: 1B-1B-2-27JG-20-3, 27-25-11-1								-	-	-	-
A3.8.3.16. Alternate Throttle/Flight Control Auxiliary Panel Component Checkout TR: 1B-1B-2-27JG-20-3, 27-25-12-1								-	-	-	-
A3.8.8.17. Flight Control Power Panel Component Checkout TR: 1B-1B-2-27JG-20-3, 27-25-13-1								-	-	-	-
A3.8.3.18. Horizontal Stabilizer Rate Transducer Component Checkout TR: 1B-1B-2-27JG-40-2, 27-42-16-5								-	-	-	-
A3.8.4. Troubleshoot TR: 1B-1B-2-27GS-00-1, -27WD-00-1											
A3.8.4.1. Roll Control – Outboard Spoilers SSN 27-14-00		*						-	-	-	-
A3.8.4.2. Roll Trim (SSN 27-18-00)		*						-	-	-	-
A3.8.4.3. Yaw Limiter (SSN 27-24-00)		*						-	-	-	-
A3.8.4.4. Yaw Trim (SSN 27-25-00)		*						-	-	-	-
A3.8.4.5. Linkage Shakers (SSN 27-34-00)		*						-	-	-	-
A3.8.4.6. Pitch Trim (SSN 27-36-00)		*						-	-	-	-
A3.8.4.7. Augmented Flight Control (SCAS) (SSNs 27-41, 42, 43, 44-00)		*						-	-	-	-
A3.8.4.8. Overwing Fairing (SSN 27-61-00)		*						-	-	-	-
A3.8.4.9. Speedbrakes (SSN 27-62-00)		*						b	-	-	-
A3.8.4.10. Wingsweep (SSN 27-81-00)								b	-	-	-
A3.8.4.11. Flap/Slat Mechanical and Control (SSN 27-82, 83-00)		*						b	-	-	-
A3.8.4.12. Surface Position/Indication (SSNs 27-90, 91, 93, 95, 96, 97-00)		*						-	-	-	-
A3.8.5. Remove and Install											
A3.8.5.1. Spoiler Electromechanical Actuator TR: 1B-1B-2-27JG-10-3, 27-14-10-2, -3								-	-	-	-
A3.8.5.2. Spoiler Controller TR: 1B-1B-2-27JG-10-3, 27-14-11-2, -3								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.8.5.3. Flight Control Trim Panel TR: 1B-1B-2-27JG-20-3, 27-25-11-2, -3								-	-	-	-
A3.8.5.4. Alternate Throttle/Flight Control Auxiliary Panel TR: 1B-1B-2-27JG-20-3, 27-25-12-2, -3								-	-	-	-
A3.8.5.5. Flight Control Power Panel TR: 1B-1B-2-27JG-30-3, 27-25-13-2, -3	*							-	-	-	-
A3.8.5.6. Yaw Trim Proximity Switch TR: 1B-1B-2-27JG-20-3, 27-25-14-2, -3								-	-	-	-
A3.8.5.7. Control Stick Grip TR: 1B-1B-2-27JG-30-3, 27-36-11-2, -3								-	-	-	-
A3.8.5.8. Pitch/Roll/Yaw SCAS Controller TR: 1B-1B-2-27JG-40-1, 27-41-10-2, -3	*							-	-	-	-
A3.8.5.9. Hinge Movement Limiter/Overwing Fairing Controller TR: 1B-1B-2-27JG-40-2, 27-42-10-2, -3								-	-	-	-
A3.8.5.10. Roll Rate Gyro TR: 1B-1B-2-27JG-40-2, 27-42-11-2, -3								-	-	-	-
A3.8.5.11. Roll SCAS Stick Transducer TR: 1B-1B-2-27JG-40-2, 27-42-15-2, -3								-	-	-	-
A3.8.5.12. Horizontal Stabilizer Rate Transducer TR: 1B-1B-2-27JG-40-2, 27-42-16-2, -3								-	-	-	-
A3.8.5.13. Yaw Sensor TR: 1B-1B-2-27JG-40-2, 27-42-10-2, -3	*							-	-	-	-
A3.8.5.14. Yaw SCAS Pedal Transducer TR: 1B-1B-2-27JG-40-4, 27-42-14-2, -3								-	-	-	-
A3.8.5.15. Yaw SCAS Common Feedback Transducer TR: 1B-1B-2-27JG-40-4, 27-42-15-2, -3								-	-	-	-
A3.8.5.16. Pitch Rate Gyro TR: 1B-1B-2-27JG-40-4, 27-44-10-2, -3								-	-	-	-
A3.8.5.17. Pitch Accelerometer TR: 1B-1B-2-27JG-40-4, 27-44-12-2, -3								-	-	-	-
A3.8.5.18. Pitch SCAS Stick Transducer TR: 1B-1B-2-27JG-40-4, 27-44-13-2, -3								-	-	-	-
A3.8.5.19. Slat Switch TR: 1B-1B-2-27JG-40-4, 27-44-14-2, -3								-	-	-	-
A3.8.5.20. Proximity Switch Electronic Package TR: 1B-1B-2-27JG-60-1, 27-61-10-2, -3								-	-	-	-
A3.8.5.21. Overwing Fairing Ground Maintenance Switch Panel TR: 1B-1B-2-27JG-60-1, 27-61-11-2, -3								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.8.5.22. Overwing Fairing Double Rotary Transducer TR: 1B-1B-2-27JG-60-1, 27-61-15-2, -3								-	-	-	-
A3.8.5.23. Proximity Sensor TR: 1B-1B-2-27JG-60-1, 27-61-16-2, -3								-	-	-	-
A3.8.5.24. Flap/Slat Controller TR: 1B-1B-2-27JG-80-7, 27-83-10-2, -3								-	-	-	-
A3.8.6. Perform Adjustments,/Alignments											
A3.8.6.1. SCAS Controller adjustment TR: 1B-1B-2-27JG-40-1, 27-41-10-5	*							-	-	-	-
A3.8.6.2. Spoiler Controller adjustment TR: 1B-1B-2-27JG-10-3, 27-14-11-5								-	-	-	-
A3.8.6.3. Flap/Slat Controller adjustment TR: 1B-1B-2-27JG-80-7, 27-83-10-5								-	-	-	-
A3.8.6.4. Hinge Moment Limiting/Overwing Fairing Controller adjustment TR: 1B-1B-2-27JG-40-2, 27-42-10-5								-	-	-	-
A3.8.6.5. Slat Switches adjustment TR: 1B-1B-2-27JG-40-4, 27-44-14-5								-	-	-	-
A3.8.6.6. SCAS Stick/Pedal Position Transducers adjustment TR: 1B-1B-2-27JG-40-2, 27-42-15-5 1B-1B-2-27JG-40-4, 27-44-13-5								-	-	-	-
A3.8.6.7. Yaw Common Feedback Transducer adjustment TR: 1B-1B-2-27JG-40-4, 27-43-15-5								-	-	-	-
A3.8.6.8. Yaw Limiter Actuator adjustment TR: 1B-1B-2-27JG-20-3, 27-24-10-5								-	-	-	-
A3.8.6.9. Yaw Trim Proximity Switch adjustment TR: 1B-1B-2-27JG-20-3, 27-25-14-5								-	-	-	-
A3.8.6.10. Patch/Roll/Yaw SCAS Surface Positioning TR: 1B-1B-2-27JG-40-1, 27-40-02								-	-	-	-
A3.9. FUEL MANAGEMENT SYSTEMS											
A3.9.1. Theory of Operation TR: 1B-1B-2-28GS-00-1								B	B	-	-
A3.9.2. Perform Ground Readiness Tests (GRTs)											
A3.9.2.1. Fuel Center of Gravity Management System GRT TR: 1B-1B-2-40JG-28-1, 40GRT-28-50								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.9.2.2. Perform checkout procedures											
A3.9.2.2.1. Fuel Quantity Sensing Checkout TR: 1B-1B-2-28JG-50-1, 28-51-01	*							2b	-	-	-
A3.9.2.2.2. FCGMS High-Low Operational Checkout TR: 1B-1B-2-28JG-50-1, 28-51-02	*							2b	-	-	-
A3.9.2.2.3. FCGMS Target CG Operational Checkout TR: 1B-1B-2-28JG-50-1, 28-51-03	*							2b	-	-	-
A3.9.2.2.4. FCGMS Safety-of-Flight Operational Checkout TR: 1B-1B-2-28JG-50-1, 28-51-04	*							2b	-	-	-
A3.9.2.2.5. FCGMS Download Operational Checkout TR: 1B-1B-2-28JG-550-1, 28-51-05	*							2b	-	-	-
A3.9.2.2.6. Fuel Transfer Operational Check TR: 1B-1B-2-28JG-20-1, 28-21-01								-	-	-	-
A3.9.2.2.7. Fuel Transfer Status Indicator TR: 1B-1B-2-28JG-20-7, 28-26-11								-	-	-	-
A3.9.2.2.8. Discrete Fuel Flow Sensor Power Supply TR: 1B-1B-2-28JG-20-7, 28-01-08								-	-	-	-
A3.9.3. Troubleshoot TR: 1B-1B-2-28GS-00-1		*						b	-	-	-
A3.9.4. Remove and Install (R&I)											
A3.9.4.1. Attitude Sensor TR: 1B-1B-2-28JG-50-2, 28-51-12								-	-	-	-
A3.9.4.2. Wing Tank Fuel Quantity Gage Bulkhead Connector TR: 1B-1B-2-28JG-50-2, 28-51-13								-	-	-	-
A3.9.4.3. Intermediate Device TR: 1B-1B-2-28JG-50-2, 28-51-14	*							-	-	-	-
A3.9.4.4. Fuel Management Panel TR: 1B-1B-2-28JG-50-2, 28-51-15								-	-	-	-
A3.9.4.5. Fuel Center-of-Gravity Management Panel TR: 1B-1B-2-28JG-50-2, 28-51-16								-	-	-	-
A3.9.4.6. Individual Fuel Tank Quantity Indicator TR: 1B-1B-2-28JG-50-2, 28-51-19								-	-	-	-
A3.9.4.7. Select Tank Fuel Quantity Indicator TR: 1B-1B-2-28JG-50-2, 28-51-20								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.9.4.8. Percent MAC/Gross Weight/Total Fuel Quantity Indicator TR: 1B-1B-2-28JG-50-2, 28-51-21								-	-	-	-
A3.9.4.9. Ground Refuel/Defuel Indicator TR: 1B-1B-2-28JG-50-2, 28-51-22								-	-	-	-
A3.9.4.10. Ground Refuel/Defuel control panel TR: 1B-1B-2-28JG-22-2, -3								-	-	-	-
A3.9.4.11. FCGMS Fuel Quantity Probe Adapter Cable Installation TR: 1B-1B-2-28JG-00-1, 28-01-08								-	-	-	-
A3.10. HYDRAULIC INDICATING SYSTEMS											
A3.10.1 Theory of Operation TR: 1B-1B-2-29GS-00-1								B	B	-	-
A3.10.2. Perform Ground Readiness Tests (GRTs)											
A3.10.2.1. Hydraulic Power GRT TR: 1B-1B-2-40JG-29-1, -40GRT-29-05								-	-	-	-
A3.10.3. Perform Checkout Procedures											
A3.10.3.1. Hydraulic Power Indicating Operational Checkout TR: 1B-1B-2-29JG-30-1, 29-30-01								-	-	-	-
A3.10.4. Troubleshoot TR: TO: 1B-1B-2-29GS-00-1, -29WD-00-1											
A3.10.4.1. Pressure		*						-	-	-	-
A3.10.4.2. Quantity		*						-	-	-	-
A3.10.4.3. Temperature								-	-	-	-
A3.10.5. Remove and install (R&I)											
A3.10.5.1. Hydraulic Pressure Signal Conditioning and Distribution Unit TR: 1B-1B-2-29JG-30-1, 29-31-14-2, -3								-	-	-	-
A3.10.5.2. Hydraulic Fluid Quantity Signal TR: 1B-1B-2-29JG-30-1, 29-32-13-2, -3								-	-	-	-
A3.10.5.3. Hydraulic Fluid Temperature Signal Conditioning and Distribution Unit TR: 1B-1B-2-29JG-30-1, 29-34-13-2, -3								-	-	-	-
A3.10.5.4. Hydraulic Power Main Pressure/Quantity Indicating Panel Assembly TR: 1B-1B-2-29JG-30-1, 29-32-12-2; -3								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.11. ATTITUDE AND HEADING SYSTEMS											
A3.11.1. Theory of Operation Gyro Stabilization System TR: 1B-1B-2-34GS-00-1, -2								-	B	-	-
A3.11.2. Perform GSS Ground Readiness Tests TR: 1B-1B-2-40JG-34-1, 40GRT-34 -27								-	-	-	-
A3.11.3. Perform gyro Stabilization Operation Checkout TR: 1B-1B-2-34JG-20-3, 34-27-02								-	-	-	-
A3.11.4. Troubleshoot TR: 1B-1B-2-34GS-00-1, -2, -34WD-00-1		*						-	-	-	-
A3.11.5. Remove and Install (R&I)											
A3.11.5.1. Electronic Control Amplifier/ Compensator TR: 1B-1B-2-34JG-20-3, 34-27-10-2, -3								-	-	-	-
A3.11.5.2. Compass Control Unit TR: 1B-1B-2-34JG-20-3, 34-27-11-2, -3								-	-	-	-
A3.11.5.3. Magnetic Azimuth Detector TR: 1B-1B-2-34JG-30-2, 34-27-12-2, -3								-	-	-	-
A3.11.5.4. Gyro Reference Unit TR: 1B-1B-2-34JG-20-3								-	-	-	-
A3.11.6. Perform Adjustments/Alignments											
A3.11.6.1. Gyro Stabilization Compass Calibration TR: 1B-1B-2-34JG-20-3, 34-27-01								-	-	-	-
A3.11.6.2. Gyro Reference Unit Mount Adjustment/Alignment TR: 1B-1B-2-34JG-20-3, 34-27-13-5								-	-	-	-
A3.11.6.3. Inertial Navigation Alignment TR: 1B-1B-2-34JG-40-1, 34-41-01								-	-	-	-
A3.12. SURFACE POSITION/MEASUREMENT SYSTEM											
A3.12.1. Theory of Operation TR: TO 1B-1B-2-27GS-00-1								B	B	-	-
A3.12.2. Troubleshoot TR: TOs 1B-1B-2-27GS-00-1, 1B-1B-2-27WD-00-1		*						-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.12.3. Perform checkout procedures TR: TOs 1B-1B-2-27JG-90-1, -2											
A3.12.3.1. Wing Sweep command position sensor component (Task 27-91-10-1)								-	-	-	-
A3.12.3.2. Left wing sweep position sensor component (Task 27-91-11-1)								-	-	-	-
A3.12.3.3. Upper rudder position sensor (Task 27-91-13-1)								-	-	-	-
A3.12.3.4. Wing sweep transformer (Task 27-91-15-1)								-	-	-	-
A3.12.3.5. Spoiler position switch (Task 27-91-16-1)								-	-	-	-
A3.12.3.6. Spoiler position sensor (Tasks 27-95-10-1, 27-96-11-1)								-	-	-	-
A3.12.3.7. Right wing sweep position sensor (Task 27-96-12-1)								-	-	-	-
A3.12.3.8. Lower rudder position sensor (Task 27-96-14-1)								-	-	-	-
A3.12.3.9. Hydraulic pressure transducer excitation power supply component checkout (Task 27-97-10-1)								-	-	-	-
A3.12.3.10. Horizontal Stabilizer Position Sensor Component Checkout (Task 27-91-12-1)								-	-	-	-
A3.12.3.11. Surface Position/Command Indicator Component Checkout (Task 27-91-14-1)								-	-	-	-
A3.12.3.12. Left Flap/Slat Rotary Variable Differential Transducer Component Checkout (Task 27-96-13-1)								-	-	-	-
A3.12.3.13. Right Flap/Slat Rotary Variable Differential Transducer Component Checkout (Task 27-96-15-1)								-	-	-	-
A3.12.4. Perform adjustments TR: TOs 1B-1B-2-27JG-90-1, -2											
A3.12.4.1. Wing sweep command position sensor (Task 27-91-10-5)								-	-	-	-
A3.12.4.2. Left wing sweep position sensor (Task 27-91-11-5)								-	-	-	-
A3.12.4.3. Horizontal stabilizer position sensor (Tasks 27-91-12-5, 27-95-11-5)								-	-	-	-
A3.12.4.4. Upper rudder position sensor (Task 27-91-13-5)								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.12.4.5. Spoiler position switch (Task 27-91-16-5)								-	-	-	-
A3.12.4.6. Spoiler position sensor (Tasks 27-95-10-5; 27-96-11-5)								-	-	-	-
A3.12.4.7. Right wing sweep position sensor (Task 27-96-12-5)								-	-	-	-
A3.12.4.8. Lower rudder position sensor (Task 27-96-14-5)								-	-	-	-
A3.12.4.9. Flap Surface Position Synchro Transmitter (Task 27-91-17-5)								-	-	-	-
A3.12.4.10. Left Flap/Slat Rotary Variable Differential Transducer (Task 27-95-13-5)								-	-	-	-
A3.12.4.11. Right Flap/Slat Rotary Variable Differential Transducer (Task 27-96-15-5)								-	-	-	-
A3.12.5. Remove and Install (R&I) TR: TOs 1B-1B-2-27JG-90-1, -2											
A3.12.5.1. Surface position command indicator (Tasks 27-91-14-2; -3)								-	-	-	-
A3.12.5.2. Surface position signal conditioning unit (Tasks 27-95-12-2; -3; 27-96-10-2; -3)								-	-	-	-
A3.12.5.3. Wing sweep command position sensor (Tasks 27-91-10-2; -3)								-	-	-	-
A3.12.5.4. Left wing sweep position sensor (Tasks 27-91-11-2; -3)								-	-	-	-
A3.12.5.5. Horizontal stabilizer position sensor (Tasks 27-91-12-2; -3; 27-95-11-2; -3)								-	-	-	-
A3.12.5.6. Upper rudder position sensor (Tasks 27-91-13-2; -3)								-	-	-	-
A3.12.5.7. Wing sweep transformer (Tasks 27-91-15-2; -3)								-	-	-	-
A3.12.5.8. Spoiler position switch (Tasks 27-91-16-2; -3)								-	-	-	-
A3.12.5.9. Spoiler position sensor (Tasks 27-95-10-2; -3; 27-96-11-2; -3)								-	-	-	-
A3.12.5.10. Right wing sweep position sensor (Tasks 27-96-12-2; -3)								-	-	-	-
A3.12.5.11. Lower rudder position sensor (Tasks 27-96-14-2; -3)								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.12.5.12. Hydraulic pressure transducer excitation power supply (Tasks 27-97-10-2; -3)								-	-	-	-
A3.12.5.13. Flap Surface Position Synchro Transmitter (Task 27-91-17-2; -3)								-	-	-	-
A3.12.5.14. Left Flap/Slat Rotary Variable Differential Transducer (Task 27-95-13-2; -3)								-	-	-	-
A3.12.5.15. Right Flap/Slat Rotary Variable Differential Transducer (Task 27-96-15-2; -3)								-	-	-	-
A3.13. AIR DATA SYSTEMS											
A3.13.1. Theory of Operation TR: TOs 1B-1B-2-34GS-00-1, -2								B	B	-	-
A3.13.2. Perform Central Air Data Ground Readiness Test (GRT) TR: TOs 1B-1B-2-40JG-34-1								-	-	-	-
A3.13.3. Perform checkout procedures											
A3.13.3.1. Pitot Heat System TR: TOs 1B-1B-2-34JG								-	-	-	-
A3.13.3.2. Central Air Data Computer (CADC) self test (Tasks 34-14-11-1; 34-15-13-1)								-	-	-	-
A3.13.3.3. Central Air Data Computer System Test (Tasks 34-14-01; 34-15-01		*						-	-	-	-
A3.13.3.4. Central Air Data Computer Program Load (Task 34-14-00)								-	-	-	-
A3.13.3.5. Vertical scale indicator (Task 34-11-01)								-	-	-	-
A3.13.3.6. Flight parameter indicator (Task 34-26-11-11-1)								-	-	-	-
A3.13.3.7. Flight Instrument Test and Modes Panel (Task 34-61-01)								-	-	-	-
A3.13.4. Troubleshoot TR: TOs 1B-1B-2-34GS-00-1, -2, -34WD-00-1		*						b	-	-	-
A3.13.5. Remove and Install (R&I)											
A3.13.5.1. Total temperature indicator (Tasks 34-13-10-2; -3)								-	-	-	-
A3.13.5.2. Airspeed mach indicator (Tasks 34-11-13-2; -3; 34-12-12-2; -3)								-	-	-	-
A3.13.5.3. Altitude vertical velocity indicator (Tasks 34-11-12-2; -3; 34-12-11-2; -3)								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.13.5.4. Flight parameter indicator (Tasks 34-26-1-2; -3)								-	-	-	-
A3.13.5.5. Ground speed/true airspeed indicator (Tasks 34-11-11-2; -3)								-	-	-	-
A3.13.5.6. Central Air Data Computer (CADC) (Tasks 34-14-11-2; -3; 34-15-13-2; -3)								-	-	-	-
A3.13.5.7. Total air temperature probe (Tasks 34-13-11-2; -3)								-	-	-	-
A3.13.5.8. Air data transducers (Tasks 34-14-12-2; -3; 34-15-12-2; -3)								-	-	-	-
A3.13.5.9. Angle of attack indexers (Tasks 34-14-10-2; -3; 34-15-11-2; -3)								-	-	-	-
A3.13.5.10. Flight instrument test/mode panel (Tasks 34-61-10-2; -3)								-	-	-	-
A3.13.5.11. Remote accelerometer (Tasks 34-11-10-2,; -3; 34-12-10-2; -3)								-	-	-	-
A3.13.5.12. Pitot static system drain (Tasks 34-14-13-2; -3; 34-15-10-2; -3)								-	-	-	-
A3.13.5.13. Pitot static angle of attack probe (Tasks 34-14-14-2; -3; 34-14-15-2; -3; 34-15-14-2; -3; 34-15-15-2; -3)								-	-	-	-
A3.13.6. Adjust pitot static angle of attack probe mount (Task 34-14-14-5) TR: TO 1B-1B-2-34JG-10-2								-	-	-	-
A3.13.7. Inspect TR: TO 1B-1B-2-34JG-10-2											
A3.13.7.1. Total Air Temperature Probe								-	-	-	-
A3.13.7.2. Pneumatic pressure lines								a	-	-	-
A3.13.7.3. Drain bottles								-	-	-	-
A3.13.7.4. Pitot static probes Task 34-14-6								a	-	-	-
A3.14. FLIGHT DIRECTOR COMPUTER/ MONITOR SYSTEM											
A3.14.1. Theory of Operation TR: TO 1B-1B-2-34GS-00-1, -2								B	B	-	-
A3.14.2. Perform Ground Readiness Test (GRT) TR: TO 1B-1B-2-40JG-34-1, -3											
A3.14.2.1. Flight director computer GRT (Task 40GRT-34-21)								-	-	-	-
A3.14.2.2. Flight instrument interface GRT (Task 40GRT-34-69)	*							-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.14.2.3. Flight Instrument Signal Converter (FISC) flight director panel interface GRT (Task 40GRT-34-70,71)								-	-	-	-
A3.14.2.4. Flight Instrument Signal Converter (FISC) AFSC mode interface GRT (Task 40GRT-34-72, 73)								-	-	-	-
A3.14.3. Troubleshoot TR: TOs 1B-1B-2-34GS-00-1, -2, 1B-1B-2-34WD-00-1		*						-	-	-	-
A3.14.4. Perform checkout procedures TR: TOs 1B-1B-2-34JG-10-1, -20-1, -20-2											
A3.14.4.1. Flight director computer (Tasks 34-21-10-1; 34-22-10-1)								-	-	-	-
A3.14.4.2. Horizontal situation indicator transformer (Task 34-23-11-1)								-	-	-	-
A3.14.4.3. Attitude director indicator (Task 34-24-01)								-	-	-	-
A3.14.4.4. Rate of turn gyro (Task 34-24-10)								-	-	-	-
A3.14.4.5. Standby attitude indicator (Task 34-24-11-1)								-	-	-	-
A3.14.4.6. AFT attitude indicator (Task 34-26-10-01)								-	-	-	-
A3.14.4.7. 28-volt DC transformer rectifier (Task 34-26-13-1)								-	-	-	-
A3.14.4.8. AFT instruments transformer (Task 34-26-14-1)								-	-	-	-
A3.14.5. Remove and Install (R&I) TR: TOs 1B-1B-2-34JG-20-1, -20-3, -60-2											
A3.14.5.1. Horizontal situation indicator (Tasks 34-23-10-2; -3; 34-26-12-2; -3)								-	-	-	-
A3.14.5.2. Flight Director Computer (FDC) (Tasks 34-21-10-2; -3; 34-22-10-2; -3)								-	-	-	-
A3.14.5.3. Flight Instrument Signal Converter (FISC) (Tasks 34-66-10-2; -3; 34-68-10-2; -3)								-	-	-	-
A3.14.5.4. Flight director system transformers (Tasks 34-23-10-2; -3; 34-23-11-2; -3; 34-26-13-2; -3; 34-26-14-2; -3)								-	-	-	-
A3.14.5.5. Attitude indicators (Tasks 34-24-11-2; -3; 34-26-10-2; -3)								-	-	-	-
A3.14.5.6. Rate of turn gyro (Tasks 34-24-10-2; -3)								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.14.5.7. Flight director computer control panel (Tasks 34-25-10-2; -3)								-	-	-	-
A3.15. ENGINE INDICATING/MONITORING											
A3.15.1. Theory of Operation TR: TOs 1B-1B-2-77GS-00-1								B	B	-	-
A3.15.2. Perform Engine Indicating Ground Readiness Test (GRT)								-	-	-	-
A3.15.3. Perform checkout procedures											
A3.15.3.1. Engine Indicating TR: TOs 1B-1B-2-77JG-00-1, 77-00-01	*							-	-	-	-
A3.15.3.2. Annunciator Light Operational Check TR: TOs 1B-1B-2-77JG-00-1, 77-00-02								-	-	-	-
A3.15.4. Troubleshoot TR: TOs 1B-1B-2-77GS-00-1, -77WD-00-1		*						-	-	-	-
A3.15.5. Remove and Install (R&I)											
A3.15.5.1. Power Level Indicator TR: TOs 1B-1B-2-77JG-10-1, 77-11-10-2, -3								-	-	-	-
A3.15.5.2. Fan RPM Indicator TR: TOs 1B-1B-2-77JG-10-1, 77-12-10-2, -3								-	-	-	-
A3.15.5.3. Nozzle Position/Core RPM Indicator TR: TOs 1B-1B-2-77JG-13-1, 77-13-10-2, -3								-	-	-	-
A3.15.5.4. Engine Temperature Indicator TR: TOs 1B-1B-2-77JG-20-1, 77-21-10-2, -3								-	-	-	-
A3.15.5.5. Signal Conditioning and Distribution Unit TR: TOs 1B-1B-2-77JG-30-1, 77-31-11-2, -3								-	-	-	-
A3.15.5.6. Engine Fuel Flow Indicator TR: TOs 1B-1B-2-77JG-40-1, 77-41-10-2, -3								-	-	-	-
A3.15.5.7. Oil Pressure/Oil Quantity Indicator TR: TOs 1B-1B-2-77JG-60-1, 77-61-10-2, -3	*							-	-	-	-
A3.15.5.8. Total Rate of Fuel Flow Indicator (Tasks 77-41-19-2; -3)								-	-	-	-
A3.15.5.9. Annunciator Driver Assembly (Tasks 77-31-10-2, -3)								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A3.16. INDICATING/RECORDING SYSTEM											
A3.16.1. Theory of Operation TR: TOs 1B-1B-2-31GS-00-1								B	B	-	-
A3.16.2. Perform indicating/recording system operational checkout TR: TO 1B-1B-2-31JG-30-1								-	-	-	-
A3.16.3. Strain Gauge Operational Check (Task 31-30-06)								-	-	-	-
A3.16.4. Accelerometer Component Checkout (Task 31-32-10-1)								-	-	-	-
A3.16.5. Troubleshoot TR: TOs 1B-1B-2-31GS-00-1, 1B-1B-2-31WD-00-1		*						-	-	-	-
A3.16.6. Remove and Install (R&I) TR: TO 1B-1B-2-31JG-30-1											
A3.16.6.1. Vertical, Lateral and Longitudinal Accelerometer (Tasks 31-32-10-2; -3)								-	-	-	-
A3.16.6.2. Structural Data Collector (Tasks 31-32-11-2; -3)								-	-	-	-
A3.16.6.3. Strain Gage Exchange (Tasks 31-30-03; -04; -05)								-	-	-	-
A3.17. CAUTION PANELS											
A3.17.1. Functional Theory of Operation TR: TO 1B-1B-2-33GS-00-1								B	B	-	-
A3.17.2. Perform annunciator lighting checkout TR: TO 1B-1B-2-33JG-10-2	*							-	-	-	-
A3.17.3. Remove and install TR: TOs 1B-1B-2-33JG-10-2, -20-1, -20 -2											
A3.17..3.1. Pilot and copilot annunciator panels Task 33-13-12								-	-	-	-
A3.17.3.2. Auxiliary caution panel Task 33-13-11								-	-	-	-
A3.17.3.3. Main caution panel Task 33-13-10	*							-	-	-	-
A3.17.3.4. OSO & DSO annunciator panels Task 33-23-11								-	-	-	-

B-1B TRAINING REQUIREMENTS

STS 2A5X3B

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
ATTACHMENT 4											
NOTE 1: All course requirements are trained in the 3-level resident wartime course. The 7 level in-residence course is not taught in wartime.											
NOTE 2: Users are responsible for annotating training references to identify current references pending STS revision.											
NOTE 3: Items marked in columns 2A or 2B marked with a (*R) are optional core tasks for ANG and AFRC.											
NOTE 4: Address comments and recommended changes through the MAJCOM Functional Managers to the AETC Training Manager, DSN 736-7899.											
A4.1. GENERAL ORGANIZATIONAL MAINTENANCE TR: TOs Applicable –1 and –2 series, B-2 CAST Book											
A4.1.1. Ensure aircraft safe for maintenance TR: 1B-2A-2-05JG-20-1, 05-21-01	*							a	-	-	-
A4.1.2. Aircraft familiarization											
A4.1.2.1. Major structural areas								A	B	-	-
A4.1.2.2. Major systems								A	B	-	-
A4.1.2.3. Danger areas								A	B	-	-
A4.1.2.4. Low Observable Fundamentals								A	A	-	-
A4.1.2.5. Observable Critical Procedures (OCP) Awareness TR: 1B-2A-2-00JG-00-1	*							-	-	-	-
A4.1.2.6. Apply external air conditioning	*							-	-	-	-
A4.1.2.7. Apply external power TR: 1B-2A-2-05JG-10-1, 05-12-23	*							-	-	-	-
A4.1.2.8. Perform selected classified data erase TR: 1B-2A-2-40JG-00-1, 40-00-01-01								-	-	-	-
A4.1.2.9. ECS Power Up/Down TR: 1B-2A-2-21JG-00-1, 21-00-05								-	-	-	-
A4.1.2.10. AFT Avionics Bay Door Open/Close								-	-	-	-
A4.1.3. Operate/Maintain peculiar (special purpose) test equipment								-	-	-	-
A4.2. AIRCRAFT SYSTEMS INTEGRATION											
A4.2.1. Purpose and Interface TR: 1B-2A-2-40GS-00										C	-
A4.2.2. Use wiring diagrams for fault isolation TR: 1B-2A-2-00WD-00, 27WD-00								-	-	3c	-
A4.3. ONBOARD TEST SYSTEM (OBTS)											
A4.3.1. Purpose and Interface TR: 1B-2A-2-31GS-00-1, -40GS-00-1										C	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A4.3.2. Use Manually Initiated Procedures and OBMP printout for system fault isolation TR: 1B-2A-2-40JG-10-1, -40GS-00; 27GS-00	*							-	-	-	-
A4.3.3. Use OBTS Data and OBTS Digital Computer System (ODCS) Reports for fault isolation of Aircraft Systems Malfunctions TR: TO 1B-2A-2-40GS-00-1 and applicable system GS-00-1								-	-	-	-
A4.3.4. Perform Operational Check of Maintenance Write Cartridge TR: 1B-2A-2-31JG-10-1, 31-14-105-1, 31-15-105-1		*						-	-	-	-
A4.3.5. Perform Onboard Maintenance Printer (OBMP) Operational Checkout TR: TO 1B-2A-2-31-JG-30-1 Task 31-37-101	*							-	-	-	-
A4.3.6. Perform Operational Check of DDU Disk Cartridge TR: 1B-2A-2-31JG-10-1, 31-18-105-1, 31-19-105-1								-	-	-	-
A4.3.7. Remove and Install											
A4.3.7.1. On Board Maintenance Printer (OBMP) TR: TO 1B-2A-2-31JG-30-1 Task 31-37-101	*							-	-	-	-
A4.3.7.2 MWC TR: 1B-2A-2-31JG-10-1, 31-14-105								-	-	-	-
A4.3.7.3. DDUC TR: 1B-2A-2-31JG-10-1, 31-18-105-2, -3;31-19-105-2, -3								-	-	-	-
A4.3.7.4. OBMP Paper Tape TR: TO 1B-2A-2-31-JG-30-1 Task 31-37-101								-	-	-	-
A4.3.7.5. SMRT Tasks 31-31-101, 31-32-101, 31-33-101, 31-34-101, 31-35-101								-	-	-	-
A4.3.8. Perform operational check Status Monitoring Remote Terminal (SMRT) Task 31-30-01	*							-	-	-	-
A4.4. OBTS GROUND PROCESSOR (OGP II)											
A4.4.1. Functional Theory of Operation TR: TOs 1B-2A-2-31GS-00-1, -40GS-00-1								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A4.4.2. Fault Isolate TR: TOs 1B-2A-2-31GS-00-1, -40GS-00-1								-	-	-	-
A4.4.3. Login/Logout OGPII TR: Software Users Manual								-	-	-	-
A4.4.4. Produce/Recreate Debrief Reports TR: TO 31S5-4-2340-1								-	-	-	-
A4.4.5. Run Predefined Text and Graphics Reports TR: TO 31S5-4-2340-1								-	-	-	-
A4.4.6. Produce Ad-Hoc Reports TR: TO 31S5-4-2340-1								-	-	-	-
A4.5. MULTIPLEX BUS SYSTEM											
A4.5.1. Purpose and Interface TR: 1B-2A-2-40GS-00-1								-	-	-	-
A4.5.2. Fault Isolate TR: 1B-2A-2-40GS-00-1, -40WD-00-1		*						-	-	-	-
A4.5.3. Remove and Install (R&I) TR: 1B-2A-2-27GS-00-1											
A4.5.3.1. Bus connectors								-	-	-	-
A4.5.3.2. Bus terminators								-	-	-	-
A4.5.3.3. Bus couplers								-	-	-	-
A4.6. STANDBY FLIGHT INSTRUMENTS											
A4.6.1. Theory of Operation TR: 1B-2A-2-31GS-00-1								-	-	-	-
A4.6.2. Perform Standby Instruments Operational Checks											
A4.6.2.1. STBY Instruments S-BIT TR: 1B-2A-2-40JG-10-1, 40-10-31-03								-	-	-	-
A4.6.2.2. STBY ADI Component Checkout TR: 1B-2A-2-31JG-20-1, 31-21-109-1								-	-	-	-
A4.6.2.3. Instrument Lighting Checkout TR: 1B-2A-2-33JG-10-1, 33-10-01								-	-	-	-
A4.6.3. Fault Isolate TR: 1B-2A-2-31GS-00-1, 31WD-00-1		*						-	-	-	-
A4.6.4. Remove and Install (R&I)											
A4.6.4.1. Airspeed mach indicator TR: 1B-2A-2-31JG-20-1, 31-21-107-2, -3								-	-	-	-
A4.6.4.2. Altimeter TR: 1B-2A-2-31JG-20-1, 31-21-103-2, -3								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A4.6.4.3. Magnetic Compass TR: 1B-2A-2-31JG-20-1, 31-21-111-2, -3								-	-	-	-
A4.6.4.4. Attitude Indicator TR: 1B-2A-2-31JG-20-1, 31-21-109-2, -3								-	-	-	-
A4.6.4.5. Vertical Velocity Indicator TR: 1B-2A-2-31JG-20-1, 31-21-105-2, -3								-	-	-	-
A4.6.4.6. AOA Indexer TR: 1B-2A-2-31JG-20-1, 31-21-101-2, -3								-	-	-	-
A4.6.5. Standby Compass Calibration TR: 1B-2A-2-31JG-20-1								-	-	-	-
A4.7. AUTOFLIGHT SYSTEMS											
A4.7.1. Theory of Operation TR: 1B-2A-2-22GS-00-1								-	-	-	-
A4.7.2. Auto Flight operational checkout TR: 1B-2A-2-40JG-10-1								-	-	-	-
A4.7.3. Fault Isolate TR: 1B-2A-2-22GS-20-1, 22WD-00-1								-	-	-	-
A4.8. ELECTRONIC FLIGHT CONTROLS											
A4.8.1. Theory of Operation TR: 1B-2A-2-27GS-00-1								-	B	-	-
A4.8.2. Perform Built-In-Tests											
A4.8.2.1. Flight Controls S-BIT TR: 1B-2A-2-40JG-10-1, 40-10-27-01	*								-	-	-
A4.8.2.2. Flight Control Computer S-BIT TR: 1B-2A-2-40JG-10-1, 40-10-27-02									-	-	-
A4.8.2.3. Flight Control Actuation System S-BIT TR: 1B-2A-2-40JG-10-1, 40-10,27-04									-	-	-
A4.8.2.4. Flight Control Computer DG-BIT TR: 1B-2A-2-40JG-10-1, 40-10-27-03									-	-	-
A4.8.2.5. Flight Control Actuation System DG-BIT TR: 1B-2A-2-40JG-10-1, 40-10-27-05									-	-	-
A4.8.2.6. Flight Controls Memory Read TR: 1B-2A-2-40JG-00-1, 40-00-03-01	*								-	-	-
A4.8.2.7. Speedbrake Switch Operational Checkout TR: 1B-2A-76-10-1, 76-15-111-1									-	-	-
A4.8.3. Fault Isolate TR: 1B-2A-2-27GS-00-1, -27WD-00-1		*							-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A4.8.4. Remove and Install (R&I)											
A4.8.4.1. Flight Control Computer TR: 1B-2A-2-27JG-90-1, 27-91-105-2, -3	*							-	-	-	-
A4.8.4.2. Attitude Motion Sensor Set TR: 1B-2A-2-27JG-90-1, 27-91-103-2, -3	*							-	-	-	-
A4.8.4.3. Actuator Remote Terminal TR: 1B-2A-2-27JG-90-1, 27-91-107-2, -3	*							-	-	-	-
A4.8.4.4. Alternate Trim Panel TR: 1B-2A-2-27JG-30-1, 27-31-105-2, -3								-	-	-	-
A4.8.4.5. Flight Data Control Panel TR: 1B-2A-2-31JG-10-1, 31-17-105-2, -3								-	-	-	-
A4.8.4.6. Flight Control Maintenance Panel TR: 1B-2A-2-27JG-90-1, 27-95-101-2, -3	*							-	-	-	-
A4.8.4.7. Master Mode Switch TR: 1B-2A-2-27JG-90-1, 27-95-103-2, -3								-	-	-	-
A4.8.4.8. Control Stick Grip TR: 1B-2A-2-27JG-90-1, 27-95-105-2, -3	*							-	-	-	-
A4.8.4.9. Stick Shaker Assembly TR: 1B-2A-2-27JG-90-1, 27-95-107-2, -3								-	-	-	-
A4.8.4.10. Pitch Position Sensor Assembly TR: 1B-2A-2-27JG-30-1, 27-31-109-2, -3								-	-	-	-
A4.8.4.11. Roll Position Sensor Assembly TR: 1B-2A-2-27JG-30-2, 27-31-111-2, -3								-	-	-	-
A4.8.4.12. Yaw Position Sensor Assembly TR: 1B-2A-2-27JG-20-1, 27-21-105-2, -3								-	-	-	-
A4.8.4.13. Weapons Bay Door LVDT TR: 1B-2A-2-94JG-90-3, 94-91-145-2, -3								-	-	-	-
A4.8.4.14. Control Stick Assembly TR: 1B-2A-2-27JG-30-1, 27-31-101-2, -3								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A4.8.4.15. Pitch Feel Augmentation Cartridge TR: 1B-2A-2-27JG-30-1, 27-31-107-2, -3								-	-	-	-
A4.8.4.16. Yaw Feel Cartridge TR: 1B-2A-2-27JG-20-1, 27-21-107-2, -3								-	-	-	-
A4.8.4.17. Roll Sensor Drive Crank TR: 1B-2A-2-27JG-30-2, 27-31-113-2, -3								-	-	-	-
A4.8.4.18. Pitch Interconnect Pushrod TR: 1B-2A-2-27JG-30-2, 27-31-117-2, -3								-	-	-	-
A4.8.4.19. Aileron Sensor Drive Pushrod TR: 1B-2A-2-27JG-30-2, 27-31-119-2, -3								-	-	-	-
A4.8.4.20. Spring TR: 1B-2A-2-27JG-30-2, 27-31-129-2, -3								-	-	-	-
A4.8.4.21. #4 Throttle Grip Quadrant Assembly TR: 1B-2A-2-76JG-10-1, 76-15-111-2, -3								-	-	-	-
A4.8.4.22. Roll Dampers TR: 1B-2A-2-27JG-30-2 (27-31-127)								-	-	-	-
A4.8.4.22. Pitch torque tube assembly TR: 1B-2A-2-27JG-30-2 (27-31-131)								-	-	-	-
A4.8.5. Perform Adjustments, Alignments, and Rigging											
A4.8.5.1. Minor Rig TR: 1B-2A-2-27JG-90-1, 27-91-107-5	*							-	-	-	-
A4.8.5.2. Major Rig TR: 1B-2A-2-27JG-00-1, 27-00-01								-	-	-	-
A4.8.5.3. Yaw Control Rigging TR: 1B-2A-2-27JG-20-1, 27-20-03								-	-	-	-
A4.8.5.4. Roll Control Rigging TR: 1B-2A-2-27JG-30-1, 27-30-01-1								-	-	-	-
A4.8.5.5. Pitch Control Rigging TR: 1B-2A-2-27JG-30-1, 27-30-01-2								-	-	-	-
A4.8.5.6. AMSS Alignment TR: 1B-2A-2-27JG-90-1, 27-91-103-5											
A4.8.5.6.1. Transfer Align TR: 1B-2A-2-27JG-90-1, 27-91-103-5-1								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A4.8.5.6.2. Mag Var Load TR: 1B-2A-2-27JG-90-1, 27-91-103-5-2								-	-	-	-
A4.8.5.6.3. Extended Align TR: 1B-2A-2-27JG-90-1, 27-91-103-5-3								-	-	-	-
A4.8.5.7. Weapons Bay Door LVDT adjustment TR: 1B-2A-2-94JG-90-3, 94-91-145-5								-	-	-	-
A4.9. FUEL MANAGEMENT SYSTEMS											
A4.9.1. Theory of Operation TR: 1B-2A-2-28GS-00-1								-	-	-	-
A4.9.2. Perform Built-In Tests											
A4.9.2.1. Fuel Measurement Management System I-BIT TR: 1B-2A-2-40JG-10-1, 40-10-28-01								-	-	-	-
A4.9.2.2. Manuel Fuel Control Panel S-BIT TR: 1B-2A-2-40JG-10-1, 40-10-28-02								-	-	-	-
A4.9.3. Perform checkout procedures											
A4.9.3.1. Fuel Measurement/Management System Operational Checkout TR: 1B-2A-2-28JG-40-1, 28-40-01	*							-	-	-	-
A4.9.3.2. Manuel Fuel Control Panel Component Checkout TR: 1B-2A-2-28JG-20-2, 28-24-113-1								-	-	-	-
A4.9.3.3. Load Select Indicator/Control Unit Component Checkout TR: 1B-2A-2-29JG-40-2, 28-42-115-1								-	-	-	-
A4.9.4. Fault Isolate TR: 1B-2A-2-28GS-00-1		*						-	-	-	-
A4.9.5. Remove and Install (R&I)											
A4.9.5.1. Fuel Measurement/Management Computer TR: 1B-2A-2-28JG-40-2, 28-42-111-2, -3	*							-	-	-	-
A4.9.5.2. Manual Fuel Control Panel TR: 1B-2A-2-28JG-20-1, 28-24-113-2, -3								-	-	-	-
A4.9.5.3. Tank Temperature Sensor TR: 1B-2A-2-28JG-40-2, 28-42-117-2, -3								-	-	-	-
A4.9.5.4. Bulkhead Electronic Device TR: 1B-2A-2-28JG-40-1, 28-42-101-2, -3								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A4.9.5.5. Load Select Indicator/Control Unit TR: 1B-2A-2-28JG-40-1, 28-42-115-2, -3								-	-	-	-
A4.9.5.6. Ground Refuel/Defuel Control Panel TR: 1B-2A-2-28JG-20-2, 28-21-113-2, -3								-	-	-	-
A4.9.5.7. Fuel Control Relay Panel TR: 1B-2A-2-28JG-20-2, 28-24-109-2, -3								-	-	-	-
A4.10. AIR DATA SYSTEMS											
A4.10.1. Theory of Operation TR: 1B-2A-2-27GS-00-2								-	B	-	-
A4.10.2. Perform checkout procedures											
A4.10.2.1. Pressure Transducer S-Bit TR: 1B-2A-2-40JG-10-1, 40-10-27-06								-	-	-	-
A4.10.2.2. Surge Heater Operational Check TR: 1B-2A-2-27JG-90-1, 27-91-101-1-1	*							-	-	-	-
A4.10.2.3. Pressure Transducer Heat Check TR: 1B-2A-2-27JG-90-1, 27-91-101-1-3								-	-	-	-
A4.10.3. Fault Isolate TR: 1B-2A-2-27GS-00-1, 27WD-00-1		*						-	-	-	-
A4.10.4. Remove and Install (R&I)											
A4.10.4.1. Alpha Pressure Transducer Unit (PTU) TR: 1B-2A-2-27JG-90-1, 27-91-101-2-1, 27-91-101-3-1								-	-	-	-
A4.10.4.2. Beta PTU TR: 1B-2A-2-27JG-90-1, 27-91-101-2-2, 27-91-101-3-2								-	-	-	-
A4.10.4.3. GLA PTU TR: 1B-2A-2-27JG-90-1, 27-91-101-2-3, 27-91-101-2-4, 27-91-101-3-3, 27-91-101-3-4								-	-	-	-
A4.10.5. Perform AD Cal TR: 1B-2A-27JG-90-1, 27-91-101-5	*							-	-	-	-
A4.11. ENGINE INDICATING/MONITORING											
A4.11.1. Theory of Operation TR: 1B-2A-2-77GS-00-1								-	-	-	-
A4.11.2. Engine Performance Monitor Operational Checkout TR: 1B-2A-2-77JG-10-1, 77-15-101-1	*							-	-	-	-
A4.11.3. Fault Isolate TR: 1B-2A-2-77GS-00-1, -77WD-00-1		*						-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A4.11.4. Remove and Install Engine Performance Monitor TR: 1B-2A-2-77JG-10-1, 77-15-101-2, -3								-	-	-	-
A4.12. FLIGHT DATA RECORDER SYSTEM											
A4.12.1. Theory of Operation TR: 1B-2A-31GS-00-1, 40-10-31-04								-	-	-	-
A4.12.2. Flight Data Recorder Checkout TR: 1B-2A-2-40JG-10-1								-	-	-	-
A4.12.3. Fault Isolate TR: 1B-2A-2-31GS-00-1		*						-	-	-	-
A4.12.4. Remove and Install (R&I)											
A4.12.4.1. Flight Data Recorder TR: 1B-2A-31JG-30-1, 31-38-101-2, -3								-	-	-	-
A4.12.4.2. Crash Survivable Memory Unit TR: 1B-2A-31JG-30-1, 31-38-103-2, -3								-	-	-	-
A4.12.5. FDR Forced Data Extract TR: 1B-2A-2-40JG-00-1, 40-00-01-16								-	-	-	-
A4.13. OBTS GROUND PROCESSOR (OGP II)											
A4.13.1. Login/Logout OGP II TR: 31S5-4-2340-1								-	-	-	-
A4.13.2. Produce/Recreate debrief reports TR: 31S5-4-2340-1								-	-	-	-
A4.13.3. Run predefined text and graphics reports TR: 31S5-4-2340-1								-	-	-	-
A4.13.4. Produce ad-hoc reports TR: 31S5-4-2340-1								-	-	-	-
A4.14. NOSE WHEEL STEERING											
A4.14.1. Theory of Nose Wheel Steering TR: 1B-2A-2-27GS-00-1, 27GS-00-2, 32GS-00-1								-	-	-	-
A4.14.2. Fault Isolate TR: 1B-2A-2-27GS-00-1, 27GS-00-2, 32GS-00-1, 27WD-00-1, 32WD-00-1								-	-	-	-
A4.14.3. Perform Operational Check TR: 1B-2A-2-32JG-50-1, 32-51-01								-	-	-	-
A4.14.4. Remove /Install Quad Linear Transducer TR: 1B-2A-2-32JG-50-1, 32-51-117-2, -3								-	-	-	-
A4.14.5. NWS Rigging TR: 1B-2A-2-32JG-50-1, 32-51-03								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
ATTACHMENT 5											
NOTE 1: All course requirements are trained in the 3-level resident wartime course. The 7 level in-residence course is not taught in wartime.											
NOTE 2: Users are responsible for annotating training references to identify current references pending STS revision.											
NOTE 3: Items marked in columns 2A or 2B marked with a (*R) are optional core tasks for ANG and AFRC.											
NOTE 4: Address comments and recommended changes through the MAJCOM Functional Managers to the AETC Training Manager, DSN 736-7899.											
NOTE 5: Items coded in column 4A will be trained using B-52 aircraft/systems. If B-52 aircraft/systems are unavailable, representative systems from other aircraft may be used.											
A5.1. GENERAL ORGANIZATIONAL MAINTENANCE TR: TOs Applicable aircraft –1 and –2											
A5.1.1. Ensure aircraft safe for maintenance	*							2b	-	-	-
A5.1.2. Aircraft familiarization											
A5.1.2.1. Major structural areas								A	B	-	-
A5.1.2.2. Major systems								A	B	-	-
A5.1.2.3. Danger areas								A	B	-	-
A5.1.2.5. Apply external air conditioning	*							2b	-	-	-
A5.1.2.6. Apply external power	*							2b	-	-	-
A5.1.2.7. Apply hydraulic power								-	-	-	-
A5.1.2.8. Use ground intercommunications								-	-	-	-
A5.2. ATTITUDE HEADING REFERENCE SYSTEM											
A5.2.1. Theory of operation TR: 1B-52H-2-11GA								B	B	-	-
A5.2.2. Perform Checkout Procedures TR: 1B-52H-2-11JG-10											
A5.2.2.1. Fast Operational Checkout	*							2b	-	-	-
A5.2.2.2. Ground Maintenance Computer Program								2b	-	-	-
A5.2.2.3. Flight Computer Program								2b	-	-	-
A5.2.3. Troubleshooting TR: 1B-52H-2-11MS-5		*						-	-	-	-
A5.2.4. Remove and Install TR: 1B-52H-2-11JG-10											
A5.2.4.1. Control Panel								-	-	-	-
A5.2.4.2. Electronic Control Amplifier								-	-	-	-
A5.2.4.3. Gyro Reference Unit								-	-	-	-
A5.2.4.4. Compass Compensation Unit								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A5.2.4.5. Attitude Switching Relay Box								-	-	-	-
A5.2.4.6. Magnetic Azimuth Detector								-	-	-	-
A5.3. STABILITY AUGMENTATION SYSTEM											
A5.3.1. Theory of operation TR: 1B-52H-2-40GA								B	B	-	-
A5.3.2. Perform Checkout Procedures TR: 1B-52H-2-40JG-1											
A5.3.2.1. Operational Check Out	*							2b	-	-	-
A5.3.2.2. YECU and PECU Indicators reset								2b	-	-	-
A5.3.2.3. Electro Magnetic Compatibility Checkout								2b	-	-	-
A5.3.2.4. Analog PECU/YECU Adjustment for Elevator/Rudder Actuator Matching								-	-	-	-
A5.3.3. Troubleshoot TR: 1B-52H-2-40MS-1/-2		*						-	-	-	-
A5.3.4. Remove and Install TR: 1B-52H-2-40JG-4											
A5.3.4.1. YAW Electronic Control Unit	*							-	-	-	-
A5.3.4.2. Parameter Scheduling Unit								-	-	-	-
A5.3.4.3. YAW Rate Sensor Unit								-	-	-	-
A5.3.4.4. Accelerometer Unit								-	-	-	-
A5.3.4.5. Pitch Electronic Control Unit	*							-	-	-	-
A5.3.4.6. Pitch Rate sensor Unit								-	-	-	-
A5.3.4.7. SAS engage Switch								-	-	-	-
A5.4. AUTOMATIC FLIGHT CONTROL SYSTEM											
A5.4.1. Theory of operation TR: 1B-52H-2-27GA								B	B	-	B
A5.4.2. Perform Checkout Procedures TR: 1B-52H-2-27JG-1/-2, 1B-52H-2-27MS-1											
A5.4.2.1. Complete Operational Check TR: 1B-52H-2-27JG-1	*							2b	-	-	-
A5.4.2.2. Maintenance BIT Check TR: 1B-52H-2-27MS-1								-	-	-	-
A5.4.2.3. Stabilizer Trim Servo Motor checkout TR: 1B-52H-2-27JG-2								-	-	-	-
A5.4.3. Troubleshoot TR: 1B-52H-2-27MS-1/-2/-3		*						2b	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A5.4.4. Remove and Install TR: 1B-52H-2-27JG-2											
A5.4.4.1. FSC Processor	*							-	-	-	-
A5.4.4.2. FSC Control Panel								-	-	-	-
A5.4.4.2. Air Control Unit Sensor								-	-	-	-
A5.4.4.3. Status Test Panel								-	-	-	-
A5.4.4.4. Flight Controller								-	-	-	-
A5.4.4.5. Turn Control Selector								-	-	-	-
A5.4.4.6. Lateral Control Servo Motor and Drive Assembly								-	-	-	-
A5.4.4.7. Elevator Servo Motor and Drive Assembly								-	-	-	-
A5.4.4.8. Stabilizer Trim Servo Motor								-	-	-	-
A5.5. POSITION INDICATING SYSTEMS											
A5.5.1. CROSSWIND CRAB POSITION INDICATING SYSTEM											
A5.5.1.1. Theory of operation TR: 1B-52H-2-10GA								A	-	-	-
A5.5.1.2. Perform Operational Checkout Procedures TR: 1B-52H-2-10JG-8 Task 4-8-1 thru 3								-	-	-	-
A5.5.1.3. Perform Crosswind Position Transmitter Adjustments TR: 1B-52H-2-10JG-9								-	-	-	-
A5.5.1.4. Troubleshoot		*						-	-	-	-
A5.5.1.5. Remove and Install TR: 1B-52H-2-10JG-8											
A5.5.1.5.1. Crosswind Position Transmitter								-	-	-	-
A5.5.1.5.2. Crosswind Crab Electrical Position Indicator								-	-	-	-
A5.5.2. FLAP POSITION INDICATING SYSTEM											
A5.5.2.1. Theory of operation TR: 1B-52H-2-4GA								A	B	-	-
A5.5.2.2. Perform Checkout Procedures TR: 1B-52H-2-4JG-9, -10											
A5.5.2.2.1. Operational Checkout TR: 1B-52H-2-4JG-9	*							2b	-	-	-
A5.5.2.2.2. Transmitter Adjustment TR: 1B-52H-2-4JG-11								-	-	-	-
A5.5.2.3. Troubleshoot TR: 1B-52H-2-4MS-3		*						-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A5.5.2.4. Remove and Install TR: 1B-52H-2-4JG-10											
A5.5.2.4.1. Transmitters								-	-	-	-
A5.5.2.4.2. Indicator								-	-	-	-
A5.5.3. LATERAL TRIM POSITION INDICATING SYSTEM											
A5.5.3.1. Theory of operation TR: 1B-52H –2-4GA								A	-	-	-
A5.5.3.2. Perform Checkout Procedures TR: 1B-52H-2-4JG-1								-	-	-	-
A5.5.3.3. Troubleshoot TR: 1B-52H-2-4MS-1								-	-	-	-
A5.5.3.4. Remove and Install TR: 1B-52H-2-4JG-2											
A5.5.3.4.1. Actuator								-	-	-	-
A5.5.3.4.2. Indicator								-	-	-	-
A5.6. ENGINE INSTRUMENT SYSTEMS											
A5.6.1. ENGINE SPEED INDICATION SYSTEM											
A5.6.1.1. Theory of operation TR: 1B-52H-2-7GA								A	-	-	-
A5.6.1.2. Perform Engine Speed Indicating System Checkout TR: 1B-52H-2-7JG-7								2b	-	-	-
A5.6.1.3. Troubleshoot TR: 1B-52H-2-7MS-5		*						-	-	-	-
A5.6.1.4. Remove and Install TR: 1B-52H-2-2-7JG-8											
A5.6.1.4.1. Tachometer Indicator								-	-	-	-
A5.6.1.4.2. Tachometer Generator								-	-	-	-
A5.6.2. ENGINE PRESSURE RATIO INDICATING SYSTEM											
A5.6.2.1. Theory of operation TR: 1B-52H-2-7GA								B	-	-	-
A5.6.2.2. Perform Checkout Procedures TR: 1B-52H-2-7JG-7	*							2b	-	-	-
A5.6.2.3. Troubleshoot TR: 1B-52H-2-7MS-5		*						2b	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A5.6.2.4. Remove and Install TR: 1B-52H-2-7JG-7											
A5.6.2.4.1. Engine Pressure Ratio Indicator								-	-	-	-
A5.6.2.4.2. Engine Pressure Ratio Transducer								-	-	-	-
A5.6.3. ENGINE OIL PRESSURE INDICATING SYSTEM											
A5.6.3.1. Theory of operation TR: 1B-52H-2-7GA								B	-	-	-
A5.6.3.2. Perform Checkout Procedures TR: 1B-52H-2-11JG-10, -11								2b	-	-	-
A5.6.3.3. Troubleshoot TR: 1B-52H-2-7MS-5		*						2b	-	-	-
A5.6.3.4. Remove and Install Engine Oil Pressure Indicator TR: 1B-52H-2-7JG-8								-	-	-	-
A5.6.3.5. Remove and Install Engine Oil Pressure Transmitter TR: 1B-52H-2-7JG-8								-	-	-	-
A5.6.4. OIL TEMPERATURE INDICATING SYSTEM											
A5.6.4.1. Theory of operation TR: 1B-52H-2-7GA								B	-	-	-
A5.6.4.2. Perform Checkout Procedures TR: 1B-52H-2-7JG-7, -8	*							2b	-	-	-
A5.6.4.3. Troubleshoot TR: 1B-52H-2-7MS-5		*						2b	-	-	-
A5.6.4.4. Remove and Install TR: 1B-52H-2-7JG-8											
A5.6.4.4.1. Oil Temperature Indicator								-	-	-	-
A5.6.4.4.2. Engine Oil Temperature Selector Switch								-	-	-	-
A5.6.4.4.3. Oil Temperature Sensor								-	-	-	-
A5.6.5. EXHASUT GAS TEMPERATURE (EGT) INDICATING SYSTEM											
A5.6.5.1. Theory of operation TR: 1B-52H-2-7GA								B	-	-	-
A5.6.5.2. Perform Checkout Procedures TR: 1B-52H-2-7JG-7, -8								2b	-	-	-
A5.6.5.2. Perform EGT Accuracy Check and Adjustments TR: 1B-52H-2-7JG-7, -8								2b	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A5.6.5.2. Perform EGT Resistance Check TR: 1B-52H-2-7JG-7, -8								2b	-	-	-
A5.6.5.3. Troubleshoot TR: 1B-52H-2-7MS-5		*						2b	-	-	-
A5.6.5.4. Remove and Install EGT Indicator TR: 1B-52H-2-7JG-8								-	-	-	-
A5.6.6. FUEL FLOW RATE INDICATING SYSTEM											
A5.6.6.1. Theory of operation TR: 1B-52H-2-7GA								B	-	-	-
A5.6.6.2. Perform Operational Checkout TR: 1B-52H-2-7JG-7	*							2b	-	-	-
A5.6.6.3. Troubleshoot TR: 1B-52H-2-7MS-5		*						2b	-	-	-
A5.6.6.4. Remove and Install TR: 1B-52H-2-7JG-8											
A5.6.6.4.1. Fuel Flow Rate Indicator								-	-	-	-
A5.6.6.4.2. Total Fuel Flow Rate Indicator								-	-	-	-
A5.6.6.4.3. Fuel Flow Rate Power Supply								-	-	-	-
A5.7. LIQUID QUANTITY INDICATING SYSTEM											
A5.7.1. FUEL QUANTITY INDICATING SYSTEM											
A5.7.1.1. Theory of operation TR: 1B-52H-2-5GA								-	-	-	-
A5.7.1.2. Perform Checkout Procedures TR: 1B-52H-2-5JG-10											
A5.7.1.2.1. System Resistance/Capacitance Checks TR: 1B-52H-2-5JG-10	*							-	-	-	-
A5.7.1.2.2. Operational Checkout TR: 1B-52H-2-5JG-10								-	-	-	-
A5.7.1.3. Troubleshoot TR: 1B-52H-2-5MS-9		*						-	-	-	-
A5.7.1.4. Remove and Install TR: 1B-52H-2-5JG-11											
A5.7.1.4.1. Fuel Quantity Indicator								-	-	-	-
A5.7.1.4.2. Total Fuel Quantity Indicator								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A5.7.2. CENTER OF GRAVITY FUEL LEVEL ADVISORY SYSTEM											
A5.7.2.1. Theory of operation TR: 1B-52H-2-5GA								B	-	-	-
A5.7.2.2. Perform Checkout Procedures TR: 1B-52H-2-5JG-11											
A5.7.2.2.1. System Self Test	*							2b	-	-	-
A5.7.2.2.2. CPPU and CGDU Operational Checkout	*							2b	-	-	-
A5.7.2.3. Troubleshoot TR: 1B-52H-2-5MS-9		*						-	-	-	-
A5.7.2.4. Remove and Install TR: 1B-52H-2-5JG-11											
A5.7.2.4.1. Control Panel Processor Unit								-	-	-	-
A5.7.2.4.2. Center of Gravity Display Unit								-	-	-	-
A5.7.2.4.3. Center of Gravity Display Unit Display Module								-	-	-	-
A5.8. PITOT STATIC SYSTEMS											
A5.8.1. Theory of operation TR: 1B-52H-2-11GA								B	-	-	-
A5.8.2. Perform Checkout Procedures TR: 1B-52H-2-11JG-2, -3, -5, -6											
A5.8.2.1. Inspect Pitot tube and Static Port								2b	-	-	-
A5.8.2.2. Static System Checkout	*							2b	-	-	-
A5.8.2.3. Pitot System Checkout	*							2b	-	-	-
A5.8.2.4. AIMS System Checkout								2b	-	-	-
A5.8.2.5. True Airspeed Indicator Checkout								2b	-	-	-
A5.8.2.6. Airspeed Indicator Checkout								2b	-	-	-
A5.8.2.7. Vertical Velocity Indicator Checkout								2b	-	-	-
A5.8.2.8. Altimeter Standby Mode Checkout TR: 1B-52H 2-11JG-12								2b	-	-	-
A5.8.2.9. Altimeter Checkout TR: 1B-52H 2-11JG-12								2b	-	-	-
A5.8.3. Troubleshoot TR: 1B-52H-2-11MS-1, -2		*						2b	-	-	-
A5.8.4. Remove and Install TR: 1B-52H-2-11JG-3,											
A5.8.4.1. True Airspeed Computer								-	-	-	-
A5.8.4.2. AIMS Computer								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A5.8.4.3. Airspeed Indicator								-	-	-	-
A5.8.4.4. Pilot/Copilot Altimeter	*							-	-	-	-
A5.8.4.5. Navigators Altimeter								-	-	-	-
A5.8.4.6. Vertical Velocity Indicator								-	-	-	-
A5.8.4.7. True A/S Indicator								-	-	-	-
A5.8.4.8. Machmeter								-	-	-	-
A5.9. FLIGHT INSTRUMENTS											
A5.9.1. PERISCOPE SEXTANT AND MOUNT											
A5.9.1.1. Theory of operation TR: 1B-52H-2-11GA								B	B	-	-
A5.9.1.2. Perform Operational Checkout TR: 1B-52H-2-11JG-4								-	-	-	-
A5.9.1.3. Troubleshoot TR: 1B-52H-2-11MS-2								-	-	-	-
5.9.1.4. Remove and Install TR: 1B-52H-2-11JG-4											
A5.9.1.4.1. Sextant Mount receptacle								-	-	-	-
A5.9.1.4.2. Sextant Shutter Assembly								-	-	-	-
A5.9.2. STANDBY COMPASS											
A5.9.2.1. Theory of operation TR: 1B-52H-2-11GA								B	-	-	-
A5.9.2.2. Perform Standby Compass Adjustment TR: 1B-52H-2-11JG-2, -3								b	-	-	-
A5.9.2.3. Troubleshoot TR: 1B-52H-2-11MS-1								-	-	-	-
A5.9.2.4. Remove and Install Standby Compass TR: 1B-52H-2-11JG-3								-	-	-	-
A5.9.3. ACCELEROMETER											
A5.9.3.1. Theory of operation TR: 1B-52H-2-11GA								-	-	-	-
A5.9.3.2. Perform Accelerometer Operational Checkout TR: 1B-52H-2-11JG-2, -3								-	-	-	-
A5.9.3.3. Troubleshoot TR: 1B-52H-2-11MS-1								-	-	-	-
A5.9.3.4. Remove and Install Accelerometer								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A5.9.4. FREE AIR TEMPERATURE INDICATING SYSTEM											
A5.9.4.1. Theory of operation TR: 1B-52H-2-11GA								B	-	-	-
A5.9.4.2. Perform Free Air Temperature Indicating Checkout TR: 1B-52H-2-11JG-4								2b	-	-	-
A5.9.4.3. Troubleshoot TR: 1B-52H-2-11MS-2								-	-	-	-
A5.9.4.4. Remove and Install TR: 1B-52H-2-11JG-4											
A5.9.4.4.1. Free Air Temperature Bulb								-	-	-	-
A5.9.4.4.2. Free Air Temperature Gage								-	-	-	-
A5.9.5. FLIGHT DIRECTOR SYSTEM											
A5.9.5.1. Theory of operation TR: 1B-52H-2-11GA								B	-	-	-
A5.9.5.2. Perform Checkout Procedures TR: 1B-52H-2-11JG-12, -13											
A5.9.5.2.1. Flight Director System Checkout Task 9-5-1 Thru 9-5-14	*							2b	-	-	-
A5.9.5.2.2. ADI and HSI Power on Check								2b	-	-	-
A5.9.5.2.3. Attitude Director Indicator Checkout TR: 1B-52H-2-11JG-12								b	-	-	-
A5.9.5.2.4. ADI Rate of Turn check								-	-	-	-
A5.9.5.2.5. HSI Checkout								-	-	-	-
A5.9.5.3. Troubleshoot TR: 1B-52H-2-11MS-6		*						2b	-	-	-
A5.9.5.4. Remove and Install TR: 1B-52H-2-11JG-12, -13											
A5.9.5.4.1. Flight Director Computer								-	-	-	-
A5.9.5.4.2. Horizontal Situation Indicator								-	-	-	-
A5.9.5.4.3. MD-1 Roll and Pitch Displacement Gyro								-	-	-	-
A5.9.5.4.4. MC-1 Switching Rate Gyro								-	-	-	-
A5.9.5.4.5. Flight Gyro Transformer								-	-	-	-
A5.9.5.4.6. Flight Gyro emergency Power Inverter								-	-	-	-
A5.9.5.4.7. Rate of Turn Gyro								-	-	-	-
A5.9.5.4.8. Attitude Director indicator								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A5.9.6. STANDBY ATTITUDE INDICATOR											
A5.9.6.1. Theory of operation TR: 1B-52H-2-11GA								B	-	-	-
A5.9.6.2. Perform Standby Attitude Indicator Checkout TR: 1B-52H-2-11JG-12								2b	-	-	-
A5.9.6.3. Troubleshoot TR: 1B-52H-2-11MS-1								-	-	-	-
A5.9.6.4. Remove and Install Standby Attitude Indicator TR: 1B-52H-2-11JG-13								-	-	-	-
A5.9.7. HEADING INDICATOR (DIRECTIONAL GYRO INDICATOR)											
A5.9.7.1. Theory of operation TR: 1B-52H-2-11GA								B	-	-	-
A5.9.7.2. Perform Pitch Trim Check TR: 1B-52H-2-11JG-12								2b	-	-	-
A5.9.7.3. Troubleshoot TR: 1B-52H-2-11MS-1		*						-	-	-	-
A5.9.7.4. Remove and Install Heading Indicator (DGI) TR: 1B-52H-2-11JG-3								-	-	-	-
A5.10. HYDRAULIC PRESSURE INDICATING SYSTEM TR: 1B-52H-2-6JG-1											
A5.10.1. Theory Of Operation TR: 1B-52H-2-6GA								-	-	-	-
A5.10.2. Perform Operational Checkout TR: 1B-52H-2-6JG-1								-	-	-	-
A5.10.3. Troubleshoot TR: 1B-52H-2-6MS								-	-	-	-
A5.10.4. Remove and Install Indicator TR: 1B-52H-2-6JG-2								-	-	-	-
A5.11. ANCILLARY SYSTEMS AND TIE-INS (OAS)											
A5.11.1. Remove/Install											
A5.11.1.1. OAS Temperature Bulb								-	-	-	-
A5.11.1.2. Static Pressure Transducer TR: TOs 1B-52G/H-2-34JG-3								-	-	-	-
A5.11.1.3. Differential Pressure Transducer TR: TO 1B-52G/H-2-34JG-3								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A5.11.1.4. Indicated Airspeed (IAS) Transducer TR: TOs 1B-52G-2-41								-	-	-	-
A5.12. OPERATE TEST EQUIPMENT											
A5.12.1. TTU 205	*							2b	-	-	-
A5.12.2. TTU 27E RPM Tester	*							2b	-	-	-
A5.12.3. Fuel Flow MO1	*							2b	-	-	-
A5.12.4. Fuel Quantity Tester		*						2b	-	-	-
A5.12.5. Jet Calibration Analyzer								2b	-	-	-
A5.12.6. Multimeter	*							-	-	-	-
A5.12.7. TTU-26/E Reluctance Tester								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
Attachment 6											
NOTE 1: This attachment identifies the Air Force standardized STS Electronic Fundamentals and Applications STS entries.											
NOTE 2: Only those items in column 4A that have proficiency level codes are trained in the Principles portion of the course.											
NOTE 3: Users may annotate additional devices or circuits not identified by this attachment that are specific to their AFSC IAW AFI 36-2201.											
NOTE 4: All course requirements are trained in the 3-level resident wartime course.											
A6.1. BASIC TERMS TR: TOs 31-1-141-2, -5											
A6.1.1 Metric Notation								B	-	-	-
A6.1.2. Direct Current (DC) terms								B	-	-	-
A6.1.3. Alternating Current (AC) terms								B	-	-	-
A6.2. BASIC CIRCUITS TR: TOs 31-1-141-2, -5											
A6.2.1. Theory of Operation								B	-	-	-
A6.2.2. Troubleshoot Circuits								2b	-	-	-
A6.3. BASIC CIRCUIT CALCULATIONS TR: TO 31-1-141-5											
A6.3.1. DC								B	-	-	-
A6.3.2. AC								B	-	-	-
A6.4. RESISTORS TR: TOs 31-1-141-2, -15											
A6.4.1. Theory of Operation								B	-	-	-
A6.6.2. Isolate faulty relays								2b	-	-	-
A6.4.3. Color code								B	-	-	-
A6.5. RELAYS/SOLENOIDS TR: TOs 31-1-141-2, -3											
A6.5.1. Relay Theory of Operation								B	-	-	-
A6.5.2. Isolate faulty relays								2b	-	-	-
A6.5.3. Solenoid Theory of Operation								B	-	-	-
A6.5.4. Isolate faulty solenoids								-	-	-	-
A6.6. INDUCTORS TR: TOs 31-1-141-2, -15											
A6.6.1. Theory of Operation								B	-	-	-
A6.6.2. Isolate faulty inductors								2b	-	-	-
A6.6.3. Calculations								2b	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A6.7. CAPACITORS TR: TOs 31-1-141-2, -5, -15											
A6.7.1. Theory of Operation								B	-	-	-
A6.7.2. Isolate faulty capacitors								2b	-	-	-
A6.7.3. Calculations								2b	-	-	-
A6.7.4. Color code								-	-	-	-
A6.8. TRANSFORMERS TR: TOs 31-1-141-2, -5, -15											
A6.8.1 Theory of Operation								B	-	-	-
A6.8.2. Isolate faulty transformers								2b	-	-	-
A6.8.3. Calculations								2b	-	-	-
A6.9. THREE PHASE TRANSFORMERS TR: TOs 31-1-141-2, -15											
A6.9.1. Theory of Operation								B	-	-	-
A6.9.2. Isolate faulty three phase transformers								-	-	-	-
A6.10. DC MOTORS TR: TOs 31-1-141-2, -9											
A6.10.1. Theory of Operation								B	-	-	-
A6.10.2. Troubleshoot DC motors								-	-	-	-
A6.11. AC MOTORS TR: TOs 31-1-141-2, -9											
A6.11.1. Theory of Operation								B	-	-	-
A6.11.2. Trouble shoot AC motors								-	-	-	-
A6.12. DC GENERATORS TR: TOs 31-1-141-2, -9, -13											
A6.12.1. Theory of Operation								B	-	-	-
A6.12.2. Troubleshoot DC generators								-	-	-	-
A6.13. AC GENERATORS TR: TOs 31-1-141-2, -9, -13											
A6.13.1. Theory of Operation								B	-	-	-
A6.13.2. Troubleshoot AC generators								-	-	-	-
A6.14. ALTERNATORS TR: TOs 31-1-141-2,-9											
A6.14.1. Theory of Operation								-	-	-	-
A6.14.2. Troubleshoot alternators								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A6.15. SYNCHRO/SERVOS TR: TOs 31-1-141-2, -9											
A6.15.1. Theory of Operation								B	-	-	-
A6.15.2. Troubleshoot synchro/servos								2b	-	-	-
A6.16. CHOPPERS (SYNCHRONOUS VIBRATORS) TR: TO 31-1-141-2											
A6.16.1. Theory of Operation								-	-	-	-
A6.16.2. Isolate faulty choppers								-	-	-	-
A6.17. TRANSDUCERS TR: TOs 31-1-141-3, -13											
A6.17.1. Theory of Operation								B	-	-	-
A6.17.2. Isolate faulty transducers								-	-	-	-
A6.18. METER MOVEMENTS TR: TOs 31-1-141-2, -7, -14C											
A6.18.1. Theory of Operation								-	-	-	-
A6.18.2. Isolate faulty meter movements								-	-	-	-
A6.19. SOLID STATE DIODES TR: TOs 31-1-141-4, -15											
A6.19.1. Theory of Operation								B	-	-	-
A6.19.2. Isolate faulty solid state diodes								2b	-	-	-
A6.19.3. Specifications								-	-	-	-
A6.19.4. Color code								-	-	-	-
A6.20. BIPOLAR JUNCTION TRANSISTORS TR: TO 31-1-141-4											
A6.20.1. Theory of Operation								B	-	-	-
A6.20.2. Isolate faulty transistors								-	-	-	-
A6.20.3. Specifications								-	-	-	-
A6.21. INTEGRATED CIRCUITS TR; TO 31-1-141-4											
A6.21.1. Familiarization								B	-	-	-
A6.21.2. Isolate faulty integrated circuits								2b	-	-	-
A6.21.3. Specifications								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A6.22. SOLID STATE SPECIAL PURPOSE DEVICES TO 31-1-141-4											
A6.22.1. Theory of Operation											
A6.22.1.1. Silicon Controlled Rectifier (SCR)								B	-	-	-
A6.22.1.2. Zener diode								B	-	-	-
A6.22.1.3. Tunnel diode								B	-	-	-
A6.22.1.4. Light Emitting Diode (LED)								B	-	-	-
A6.22.1.5. Liquid Crystal Diode (LCD)								B	-	-	-
A6.22.1.6. Unijunction Transistor (UJT)								B	-	-	-
A6.22.1.7. Junction Field Effect Transistor (JFET)								B	-	-	-
A6.22.1.8. Metal Oxide Semi-Conductor Field Effect Transistor (MOSFET)								B	-	-	-
A6.22.2. Isolate faulty special purpose devices								2b	-	-	-
A6.23. ELECTRON TUBES											
A6.23.1. Theory of Operation								-	-	-	-
A6.23.2. Isolate faulty electron tubes								-	-	-	-
A6.23.3. Specifications								-	-	-	-
A6.24. CATHODE RAY TUBES (CRT) TR: TOs 31-1-141-1, -3											
A6.24.1. Theory of Operation								-	-	-	-
A6.24.2. Isolate faulty CRTs								-	-	-	-
A6.25. SOLDER/DESOLDER TR: TOs 00-25-234, 1-1A-14, 31-1-141-15											
A6.25.1. Terminal connections								2b	-	-	-
A6.25.2. Printed Circuit (PC) boards								-	-	-	-
A6.25.3. Multipin connectors								-	-	-	-
A6.25.4. Coaxial connectors								-	-	-	-
A6.26. ASSEMBLE/DISASSEMBLE SOLDERLESS CONNECTORS TR: TOs 1-1A-14, 31-1-141-15											
A6.26.1. Crimp connections								3c	B	-	-
A6.26.2. Coaxial connections								3c	B	-	-
A6.26.3. Multipin connections								3c	B	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A6.27. TEST EQUIPMENT USAGE TR: TOs 31-1-141-1, -7, -8, -9, -10											
A6.27.1. Analog multimeter								-	-	-	-
A6.27.2. Oscilloscope								2b	-	3c	-
A6.27.3. Signal Generator								2b	-	-	-
A6.27.4. Frequency counter								-	-	-	-
A6.27.5. Spectrum Analyzer								-	-	-	-
A6.27.6. Field Strength Tester								-	-	-	-
A6.27.7. Digital multimeter								3c	-	-	-
A6.27.8. Digital logic probe								-	-	-	-
A6.27.9. Capacitor tester								-	-	-	-
A6.27.10. Capacitor substitution box								-	-	-	-
A6.27.11. DC restorer								-	-	-	-
A6.27.12. Logic current tracer								-	-	-	-
A6.27.13. Tube tester								-	-	-	-
A6.27.14. Logic pulser								-	-	-	-
A6.27.15. Logic analyzer								-	-	-	-
A6.27.16. Signature analyzer								-	-	-	-
A6.27.14. Reflectometer								2b	-	3c	-
A6.28. TRANSISTOR AMPLIFIER CIRCUITS TR: TOs 31-1-141-1, -4											
A6.28.1. Theory of Operation											
A6.28.1.1. Amplifier circuits								B	-	-	-
A6.28.1.2. Stabilization circuits								-	-	-	-
A6.28.1.3. Coupling circuits								-	-	-	-
A6.28.2. Troubleshoot circuits								-	-	-	-
A6.29. ELECTRON TUBE AMPLIFIERS TR: TO 31-1-141-3											
A6.29.1. Theory of Operation								-	-	-	-
A6.29.2. Troubleshoot circuits								-	-	-	-
A6.30. OPERATIONAL AMPLIFIERS (OP AMPS) TR: TO 31-1-141-4											
A6.30.1. Theory of Operation								B	-	-	-
A6.30.2. Isolate faulty operational amplifiers								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A6.31. MAGNETIC AMPLIFIERS TR: TO 31-1-141-4											
A6.31.1. Theory of Operation								-	-	-	-
A6.31.2. Troubleshoot circuits								-	-	-	-
A6.32. SATURABLE REACTORS											
A6.32.1. Theory of Operation								-	-	-	-
A6.32.2. Troubleshoot circuits								-	-	-	-
A6.33. POWER SUPPLY CIRCUITS TOs 31-1-141-3, -4, -9, -15											
A6.33.1. Theory of Operation											
A6.33.1.1. Recitifers								B	-	-	-
A6.33.1.2. Filters								B	-	-	-
A6.33.2. Troubleshoot circuits								-	-	-	-
A6.34. VOLTAGE REGULATORS TR: TOs 31-1-141-3, -4											
A6.34.1. Theory of Operation								B	-	-	-
A6.34.2. Troubleshoot circuits								-	-	-	-
A6.35. RESISTIVE/CAPACITIVE/INDUCTIVE (RCL) CIRCUITS TR: TOs 31-1-141-2, -5											
A6.35.1. Basic operation								B	-	-	-
A6.35.2. Resonant operation								B	-	-	-
A6.35.3. Troubleshoot circuits								-	-	-	-
A6.35.4. Calculations								2b	-	-	-
A6.36. FREQUENCY SENSITIVE FILTERS TR: TO 31-1-141-2											
A6.36.1. Theory of Operation								B	-	-	-
A6.36.2. Troubleshoot circuits								-	-	-	-
A6.36.3. Calculations								-	-	-	-
A6.37. WAVE GENERATION CIRCUITS TR: TOs 31-1-141-3, -4, -10											
A6.37.1. Theory of Operation											
A6.37.1.1. Oscillators								B	-	-	-
A6.37.1.2. Multivibrators								B	-	-	-
A6.37.1.3. Waveshaping circuits								B	-	-	-
A6.37.2. Troubleshoot circuits								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A6.38. LIMITER CIRCUITS TR: TO 31-1-141-4											
A6.38.1. Theory of operation											
A6.38.1.1. Diode								B	-	-	-
A6.38.1.2. Zener diode								B	-	-	-
A6.38.1.3. Transistor								B	-	-	-
A6.38.2. Troubleshoot circuits								-	-	-	-
A6.39. CLAMPER CIRCUITS TR: TO 31-1-141-4											
A6.39.1. Theory of Operation								B	-	-	-
A6.39.2. Troubleshoot circuits								-	-	-	-
A6.40. DIGITAL NUMBERING SYSTEMS TR: TO 31-1-141-5											
A6.40.1. Conversion											
A6.40.1.1. Binary								B	-	-	-
A6.40.1.2. Octal								B	-	-	-
A6.40.1.3. Hexadecimal								B	-	-	-
A6.40.2. Math operations											
A6.40.2.1. Binary								B	-	-	-
A6.40.2.2. Octal								B	-	-	-
A6.40.2.3. Hexadecimal								B	-	-	-
A6.40.3. Binary code systems								B	-	-	-
A6.41. DIGITAL LOGIC FUNCTIONS TR; TOs 31-1-141-4, -9											
A6.41.1. Theory of Operation											
A6.41.1.1. Main Logic Gates								B	-	-	-
A6.41.1.2. Flip-Flops								B	-	-	-
A6.41.2. Troubleshoot circuits								-	-	-	-
A6.41.3. Logic families											
A6.41.3.1. Transistor to Transistor Logic (TTL)								B	-	-	-
A6.41.3.2. Complementary Metal Oxide Semi-Conductor (CMOS)								B	-	-	-
A6.42. BOOLEAN EQUATIONS TR: TO 31-1-141-5											
A6.42.1. Diagram to equation								B	-	-	-
A6.42.2. Equation to diagram								B	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A6.42.3. Simplify expressions								-	-	-	-
A6.43. COMPUTERS TR: TOs 31-1-141-6C, -9											
A6.43.1. Operation principles								B	-	-	-
A6.43.2. Load programs								-	-	-	-
A6.43.3. Write and debug programs								-	-	-	-
A6.43.4. Isolate faulty major computer units								-	-	-	-
A6.43.5. Troubleshoot computer subassemblies or circuits								-	-	-	-
A6.43.6. Types of memories								B	-	-	-
A6.43.7. Perpheral devices								B	-	-	-
A6.43.8. Programming languages								-	-	-	-
A6.44. MICROPROCESSOR CONTROLLED SYSTEMS TR: TOs 31-1-141-6C, -9											
A6.44.1. Theory of operation											
A6.44.1.1 Basic								B	-	-	-
A6.44.1.2. Universal								B	-	-	-
A6.44.1.3. 8085 Specific								-	-	-	-
A6.44.2. Isolate faulty microprocessors								-	-	-	-
A6.45. LOGIC CIRCUITS TR: TOs 31-1-141-3, -5, -9, -13											
A6.45.1. Theory of Operation											
A6.45.1.1. Counters								B	-	-	-
A6.45.1.2. Registers								B	-	-	-
A6.45.1.3. Combinational logic circuits								B	-	-	-
A6.45.2. Troubleshoot circuits								2b	-	-	-
A6.46. DIGITAL TO ANALOG AND ANALOG TO DIGTAL CONVERTERS TR: TO 31-1-141-13											
A6.46.1. Theory of Operation											
A6.46.1.1. Weighted Resistor digital to analog (D/A)								B	-	-	-
A6.46.1.2. Approximation analog to digital (A/D)								B	-	-	-
A6.46.1.3. Ramp analog to digital (A/D)								B	-	-	-
A6.46.2. Isolate faulty converters								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A6.47. TRANSMISSION LINES TR: TOs 31-1-141-7, -8, -9, -11											
A6.47.1. Theory of Operation								B	-	-	-
A6.47.2. Perform measurements								-	-	-	-
A6.47.3. Calculations								-	-	-	-
A6.47.4. Isolate faulty transmission lines								-	-	-	-
A6.48. WAVEGUIDES TR: TOs 31-1-141-9, -11											
A6.48.1. Theory of Operation								B	-	-	-
A6.48.2. Isolate faulty waveguides								-	-	-	-
A6.49. MICROWAVE OSCILLATORS AND AMPLIFIERS TR: TOs 31-1-141-3, -10, -11											
A6.49.1. Theory of Operation								B	-	-	-
A6.49.2. Tune or adjust								-	-	-	-
A6.49.3. Isolate faulty microwave oscillators and amplifiers								-	-	-	-
A6.50. RESONANT CAVITIES TR: TOs 31-1-141-3, -9, -11											
A6.50.1. Theory of Operation								-	-	-	-
A6.50.2. Isolate faulty resonant cavities								-	-	-	-
A6.50.3. Tune or adust								-	-	-	-
A6.51. TRANSMITTERS TR: TOs 31-1-141-4, -9, -13											
A6.51.1. Theory of Operation											
A6.51.1.1. Amplitude Modulation								-	-	-	-
A6.51.1.2. Frequency Modulation								-	-	-	-
A6.51.1.3. Single Side Band								-	-	-	-
A6.51.1.4. Pulse Modulation								-	-	-	-
A6.51.2. Troubleshoot circuits								-	-	-	-
A6.52. RECEIVERS TR: TOs 31-1-141-4, -9, -13											
A6.52.1. Theory of Operation											
A6.52.1.1. Amplitude Modulation								-	-	-	-
A6.52.1.2. Frequency Modulation								-	-	-	-
A6.52.1.3. Single Side Band								-	-	-	-
A6.52.1.4. Pulse Modulation								-	-	-	-

1. TASKS, KNOWLEDGE AND TECHNICAL REFERENCES	2. Core Tasks		3. Certification For OJT					4. Proficiency Codes Used To Indicate Training/Information Provided (See Note)			
	A	B	A	B	C	D	E	A 3 Skill Level	B 5 Skill Level	C 7 Skill Level	
	5	7	Training Start	Training Complete	Trainee Initials	Trainer Initials	Certifier Initials	(1) Crse	(1) CDC	(1) Crse	(2) CDC
A6.52.2. Troubleshoot circuits								-	-	-	-
A6.53. TRANSMISSION POWER TR: TOs 31-1-141-7, -8, -11											
A6.53.1. Perform measurements								-	-	-	-
A6.53.2. Calculations								-	-	-	-
A6.54. ANTENNAS TR: TO 31-1-141-12											
A6.54.1. Theory of Operation								-	-	-	-
A6.54.2. Perform alignments								-	-	-	-
A6.54.3. Isolate faulty antennas								-	-	-	-
A6.55. MICROPHONES TR: TO 31-1-141-3											
A6.55.1. Theory of Operation								-	-	-	-
A6.55.2. Troubleshoot circuits								-	-	-	-
A6.56. SPEAKERS											
A6.56.1. Theory of Operation								-	-	-	-
A6.56.2. Troubleshoot circuits								-	-	-	-
A6.57. PHOTOSENSITIVE DEVICES TR: TOs 31-1-141-3, -4											
A6.57.1. Theory of Operation								B	-	-	-
A6.57.2. Isolate faulty photosensitive devices								-	-	-	-
A6.58. DISPLAY TUBES TO 31-1-141-3											
A6.58.1. Theory of Operation								-	-	-	-
A6.58.2. Isolate faulty display tubes								-	-	-	-
A6.59. SUPPORT SUBJECTS TR: TOs 31-1-141-1, 00-25-234 AFR 80-23, 700-13											
A6.59.1. Practice safety applicable to electronics								B	-	-	-
A6.59.2. First aid for electrical shock								B	-	-	-
A6.59.3 Electrostatic discharge (ESD) control								B	-	-	-
A6.59.4. Electromagnetic effects on electronic equipment											
A6.59.4.1. Pulse (EMP)								B	-	-	-
A6.59.4.2. Interference (EMI)								B	-	-	-
A6.59.4.3. Compatibility (EMC)								B	-	-	-

SECTION B - COURSE OBJECTIVE LIST

4. Measurement: Each proficiency coded STS task or knowledge item taught at the technical school is measured through the use of an objective. An objective is a written instruction for the student so he or she knows what is expected of them to successfully complete training on each task. Each objective is composed of a condition, behavior, and standard; which states what is expected of the student for each task. The condition is the setting in which the training takes place (i.e. TOs, type of equipment, etc.). The behavior is the observable portion of the objective (i.e. perform an operational check). The standard is the level of performance that is measured to ensure the STS proficiency code level is attained. Each objective uses letter code(s) to identify how it is measured. All objectives use the PC code(s) which indicates a progress check is used to measure subject or task knowledge. W indicates a comprehensive written test and is used to measure the subject or task knowledge at the end of a block of instruction. PC/W indicates a subject or task knowledge progress check and a separate measurement of both knowledge and performance elements using a written test.

5. Standard: The standard of written examinations is 65% to 72%, depending on the number of questions on the test. Standards of performance are indicated in the objective and are also indicated on the individual progress check checklist. The checklist is used by the instructor to document each student's progress on each task. Instructor assistance is provided as needed during the progress check, and students may be required to repeat all or part of the behavior until satisfactory performance is attained. Students must satisfactorily complete all PCs prior to taking the written test.

6. Proficiency Level: Review column 4A of the STS to determine the proficiency level of a particular task or knowledge item. Review the course objective list to determine which STS item the objective supports. Review the proficiency code key in Part II, Section A of this CFETP for an explanation of the proficiency codes. Most task performance is taught to the '2b' proficiency level which means the students can do most parts of the task, but does need assistance on the hardest parts of the task (partially proficient). The student can also determine step by step procedures for doing the task. For tasks that are taught to the '3c' proficiency level, students can do all parts of the task and only require a spot check on completed work (competent). The student can also identify why and when a task must be done and why each step is needed.

7. Course Objectives: A detailed listing of initial skills or craftsman course objectives may be obtained by submitting a written request to the AETC Training Manager, 365 TRS/TRR, 609 9th Ave., Stop 242, Sheppard AFB TX, 76311-2335.

SECTION C – SUPPORT MATERIAL:

8. The following list of support materials is not inclusive; however, it covers the most frequently referenced areas. For further information on the following courses, contact the OPR at:

333 TRS/TTCQS
601 D Street
Keesler AFB, MS 39534-2229
DSN 597-5893

782 TRG
826 Avenue G Suite 4
Sheppard AFB, TX 76311-2867
DSN 736-2568

362 TRS/TRR
613 10th Street
Sheppard AFB, TX 76311-2352
DSN 736-2996

Course Number	Course Title	OPR
*AFQTP 2EXXX-201L	Comm-Electronics Workcenter Managers Handbook	333 TRS
*AFQTP 2EXXX-201LB	C-E Managers Handbook	333 TRS

*Courses can be downloaded from 333 TRS home page at: http://qflight.kee.aetc.af.mil

Course Number	Course Title	OPR
**J6ANU00066-038	Air Force Technical Order System (General)	362 TRS
**J6ANU00066-039	Air Force Technical Order System (Advanced)	362 TRS

**These courses are Computer Based Training (CBT), and may be requested as any other course. Courses are listed at web site http://hq2af.keesler.af.mil/ETCA.htm (formerly AFCAT 36-2223).

SECTION D – TRAINING COURSE INDEX

9. Purpose: This section of the CFETP identifies training courses available for the Instrument & Flight Control Systems specialty, and shows how the courses are used by each MAJCOM in their career field training programs. For further information on the following courses, contact the OPR at:

365 TRS/TRR
609 9th Ave.
Sheppard AFB, TX 76311-2335
DSN 736-7899

10. Air Force In-Resident Courses:

Refer to web site http://hq2af.keesler.af.mil/ETCA.htm (formerly AFCAT 36-2223, USAF Formal Schools Catalog), for information on all courses listed in this index.

COURSE NO.	COURSE TITLE	LOCATION	USER
J3ABR2A533B 001	Instrument & Flight Control Systems Apprentice	Sheppard AFB	AF, ANG
J3ACR2A573 001	Craftsman Avionics Course	Sheppard AFB	AF, ANG

11. Extension Course Institute (ECI) Courses:

365 TRS/TRR
609 9th Ave.
Sheppard AFB, TX 76311-2335
DSN 736-7899

COURSE NO.	COURSE TITLE	USER
CDC 2A553B	Instrument & Flight Control Systems Journeyman	AF, ANG
CDC 2AX7X	Aerospace Maintenance Craftsman	AF,ANG

12. Exportable Courses:

For further information on the following exportable courses, contact the OPRs at:

367 TRS/TRSS
6058 Aspen Ave
Hill AFB, UT 84056-5805
DSN 777-7830/8741

362 TRS
613 10th Ave
Sheppard AFB, TX 76311-2352
DSN 736-5206

The following Interactive Courseware (ICW) is available from, or under development by 367 TRS/TRSS at Hill AFB Utah. To obtain more information about each course, request a copy of the Courseware Catalog from the 367 TRS/TRSS. Their FAX number is DSN 777-0897 and their customer service number is DSN 777-0160. To request ordering information on hardware, your MAJCOM training POC (for ACC, AMC, and ANG) is the first stop. For personnel under other MAJCOMs, you contact them directly, they will provide you the information required for purchasing the item through them. If you decide to purchase the system, they will FAX you the AF Form 616 to use for an example. The 367 TRSS internet site is: http://www.hill.af.mil/367TRSS/findex.htm. The Hill AFB course catalog can be ordered from DSN 777-0160.

COURSE NO.	COURSE TITLE	OPR	USER
00TVT0000	FOD Prevention (VHS tape)	367 TRSS	AF
00TVT0001	Safety and Radio Frequency (RF) Radiation (VHS tape)	367 TRSS	AF
00TVT0001V1	Troubleshooting Techniques (ICW)	367 TRSS	AF
00TTV0002	Aerospace Ground Equipment Training (ICW)	367 TRSS	AF
00TCB0002V1	Multimeter Familiarization (ICW)	367 TRSS	AF
00CIV0008	Use and Care of Type III Torque Wrenches (ICW)	367 TRSS	AF
00CVT0009	Torque Wrench, Use and Care (VHS tape)	367 TRSS	AF
00TVT0011	Cold Weather Indoctrination (VHS tape)	367 TRSS	AF
00CVT0012	Manual Acft Snow Removal (VHS tape)	367 TRSS	AF
00TVT0017V1	General Aircraft Corrosion Control (VHS tape)	367 TRSS	AF
00TIV1000	Aircraft Marshaling (ICW)	367 TRSS	AF
01SIV8971V5.1.1	-86 Diesel Power Unit Operation (ICW)	367 TRSS	AF
00SIV8972	MD-3A Air Conditioner Operation (ICW)	367 TRSS	AF
00TVT0015	Installation of Aircraft Switch Guards	367 TRSS	AF
01CIV0016	B-1B Emergency Ground Egress	367 TRSS	AF
01CIV0051	B-1B Command Aircraft Systems Training (CAST) General Airplane Information	367 TRSS	AF
01CIV0052	B-1B Hazardous Zones	367 TRSS	AF
01CIV1001	B-1B Safe for Maintenance	367 TRSS	AF
01CIV1615	B-1B Egress System Safety	367 TRSS	AF
01JIV0001	B-1B General Electrical Maintenance, part 1	367 TRSS	AF
01JIV0002	B-1B General Electrical Maintenance, part 2	367 TRSS	AF
01JIV0003	B-1B General Electrical Maintenance, part 3	367 TRSS	AF
01JIV0005	B-1B CITS Parameter Monitor Codes (PMC)	367 TRSS	AF
01JIV0006	B-1B CITS Maintenance Codes	367 TRSS	AF
01JIV0038	B-1B Hardness Critical Procedures (HCP) Check	367 TRSS	AF
01JIV1100	B-1B Panel Types, Location, and Construction	367 TRSS	AF

COURSE NO.	COURSE TITLE	OPR	USER
01JIV1101	B-1B Panel and Secondary Structure Inspection	367 TRSS	AF
01JIV1103	B-1B Forward Equipment Bay (FEB) Panels	367 TRSS	AF
01JIV1134	B-1B Fasteners/Related Hardware	367 TRSS	AF
01JIV2301	B-1B CAST Aircraft Systems and Power Plant	367 TRSS	AF
01JIV4300	B-1B EMUX	367 TRSS	AF
01JIV5500	B-1B CAST CITS/EMUX	367 TRSS	AF
01JIV5501	B-1B Ground Readiness Tests (GRT)	367 TRSS	AF
01SIV1005	B-1B Proximity Switch (Cover/Uncover) Simulated Airborne Conditions	367 TRSS	AF
01SIV2400	B-1B Auxiliary Power Unit Operation	367 TRSS	AF
C6AZM 52CPB0099	B-52H Handbook	367 TRSS	AF
C6AZM 52CPB0330	B-52H Hourly Postflight Inspection	367 TRSS	AF
C6AZM 52CPB0419	B-52H Panel and Secondary Structure Inspection	367 TRSS	AF
C6AZM 52CPB1000	B-52H Towing Supervisor	367 TRSS	AF
C6AZM 52CPB1001	B-52H Servicing	367 TRSS	AF
C6AZM 52CPB1002	B-52H LOX Servicing	367 TRSS	AF
C6AZM 52CPB46BO	B-52H Refuel Supervisor	367 TRSS	AF
C6AZM 52CPB5271-74	B-52H Command Aircraft Systems Training (CAST)	367 TRSS	AF
J6AZU2E066 038	Air Force Technical Order (T.O.) System (Gen)	362 TRS	AF
J6AZU2E066 039	Air Force Technical Order (T.O.) System (Gen) (Adv)	362 TRS	AF
J6ANU00066-043 (Tentative)	CAMS for Flightline and Backshop Note: This course should activate Aug 00. It will replace existing CAMS courses listed below.	362 TRS	AF

COURSE NO.	COURSE TITLE	OPR	USER
J6AZU2E066 058	Air Force Maintenance Data Collection System	362 TRS	AF
J6AZU2E066 059	Air Force Maintenance Data Collection System	362 TRS	AF
J6AZU2E066 061	Air Force Maintenance Data Collection System Operators Course (Intro)	362 TRS	AF
J6AZU2E066 062	Air Force Maintenance Data Collection System Mid Level Maintenance Mgrs	362 TRS	AF

13. Training Detachment (TD) Courses:

For further information on the TD courses, contact the OPRs at:

372 TRS
912 I Ave., Suite 3
Sheppard AFB, TX 76311-2361
DSN 736-4801

COURSE NO.	COURSE TITLE	OPR	USER
J4AMF/ASF/AST 30000-115	CITS/EMUX Maintenance Unit (CEMU) Operator	372 TRS	AF, ANG
J4AMF/ASF/AST 2A4X1 027	B-52H Acft Guidance and Control Craftsman, Digital Auto FLCS/Flightline	372 TRS	AF, AFRC
J4AMF/ASF/AST 2A4X1 043	B-52H Acft Guidance and Control (AN/ASN-134/Flightline)	372 TRS	AF, AFRC
J4AMF/ASF/AST 2A4X1 044	B-52H Acft Guidance and Control Craftsman, Stability Augmentation Subsys/ Flightline	372 TRS	AF, AFRC
J4AMF/ASF/AST 2A4X1 045	B-52H Guidance and Control Systems, Fuel Quantity Indicating Sys/Flightline	372 TRS	AF, AFRC
J4AMF/ASF/AST 2A5X3 000	B-2 Avionics System Craftsman (Common Core) Certification Training	372 TRS	AF
J4AMF/ASF/AST 2A5X3B 007	B-2 Avionics Systems Craftsman (Inst & Flt Con Computer)	372 TRS	AF
J4AMF/ASF/AST 2A5X3B 008	B-2 Avionics Systems (Flight Controls System Trainer)(Certification Training)	372 TRS	AF
J4AMF/ASF/AST 2A5X3B 004	Avionics Systems (Inst & Flt Con Computer/Flt Con/Auto Pilot)	372 TRS	AF, ANG

COURSE NO.	COURSE TITLE	OPR	USER
J4AMF/ASF/AST 2A5X3B 005	B-1B Avionics Systems (Inst & Flt Con Computer/Navigation)	372 TRS	AF, ANG
J4AMF/ASF/AST 2A5X3B 006	B-1B Avionics Systems (Inst & Flt Con Computer/Inst Systems-General)	372 TRS	AF, ANG
J4AMF/ASF/AST 2A5X3A-029	B-1B Acft E & E Systems Craftsman (Kapton Wire Repair)	372 TRS	AF, ANG

14. Courses Under Development/Revision:

COURSE NO.	**COURSE TITLE**	**OPR**	**USER**
J6ANU00066-043 (Tentative)	CAMS for Flightline and Backshop Note: This course should activate Aug 00. It will replace existing CAMS courses listed below.	362 TRS	AF

SECTION E - MAJCOM UNIQUE REQUIREMENTS

15. Currently only Air Combat Command has a MAJCOM mandatory course list (MMCL). MAJCOMs change mandatory course requirements occasionally. Up-to-date ACC requirements can be obtained at http://xo.acc.af.mil/xom/XOMM/XOMM.html. After access, click on "training" and then on "MMCL" Refer to the HQ ACC MMCL for additional information. The below requirements are current as of 10 Mar 00.

COURSE NO.	COURSE TITLE	MDS
2A5X3B-004	Instrument and Flight Control Computer Craftsman (Flight Control/Autopilot)	B-1
2A5X3B-005	Instrument and Flight Control Computer Craftsman (Navigation)	B-1
2A5X3B-006	Instrument and Flight Control Computer Craftsman (Instrument Systems-General)	B-1
2A5X3B-007	B-2 Avionics Systems Craftsman (Instrument and Flight Control Computer)	B-2
2A4X1-027	B-52 Aircraft Digital Flight Control	B-52
2A4X1-043	B-52 Guidance and Control AN/ASN-134	B-52
2A4X1-044	B-52 Aircraft Stability Augmentation	B-52
2A4X1-045	B-52 Aircraft Fuel Quantity Indication	B-52

16. Additional courses available from ACC.

Contact the course OPRs at:

HQ ACC LSG / OL-CA
6058 Aspen
Hill AFB, UT 84056-5805
DSN 777-4278

COURSE NO.	COURSE TITLE	OPR	USER
Y140009	ACC Production Superintendent	HQ ACC/ LSG	ACC
Y140015	ACC Maintenance Instructor	HQ ACC/ LSG	ACC
Y140020	ACC Maintenance Training Management	HQ ACC/ LSG	ACC